STD **RESOURC** GUIDE



STD RESOURCE GUIDE





The role of the Oregon Sexually Transmitted Disease (STD) Program is to try to minimize STD-related morbidity in Oregon by identifying priorities and targeted goals, implementing policy and procedures, and providing leadership and support of public health activities related to STD prevention. We aim to reduce STD incidence by interrupting forward disease transmission, and to minimize harm from STD sequelae. Specifically, the state STD program staff provide:

- Technical assistance and consultation for Oregon health providers, local health authority staff and the public regarding STD casework, treatment, and disease transmission prevention
- Identification of Oregon's safety net STD health service provision venues and support for STD screening and antibiotic treatment services at those sites, including Expedited Partner Therapy (EPT).
- Assistance with case surveillance, analysis of disease trends using case report data, assessment of
 treatment in accordance with CDC guidelines, prevalence monitoring in high-risk communities and
 populations, and creation of updated reports and fact sheets reflecting data analysis and program
 effectiveness including informing screening efforts for targeted high risk populations
- Monitoring and assistance with improvement in quality of case-based data in part by providing and
 maintaining a workable database ensuring confidentiality and security for all data according to National
 Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention guidance
- An up-to-date comprehensive STD Outbreak Response Plan and staff assistance with implementation, including onsite work, when necessary
- An up-to-date state STD website, including up-to-date and comprehensive disease investigative guidelines for STDs and HIV
- Provision and coordination of face-to-face training opportunities and access to informational/training materials and support for enhanced capacity building for local/state_staff
- Collaboration with public and private key stakeholders, including laboratories, Coordinated Care
 Organizations, other insurers and health systems to understand trends in the technological and laboratory
 advancement in the field of STD and maintain awareness of national trends, emerging STD infections or
 drug resistance, and information regarding advancements in the STD field of work
- Collaboration and responsive work with federal partners and funders in completing grant applications, and conducting required data reporting and program implementation activities
- Development and inclusion of STD prevention objectives in statewide public health planning
- Development of an STD legislative agenda in response to identified need
- Collaborative work with major health/insurance plan providers with goals of assuring and promoting
 adequate use of population-based STD health interventions, case management, coverage and
 reimbursement of STD prevention services (including HIV), and use of EPT
- Continued vigilance in identifying and minimizing health disparities and promoting access to STD health services including access to EPT
- Compliance and/or quality assurance evaluations of local health authority STD programs via triennial review process
- Evaluation of state level program effectiveness via targeted process outcome measurement and statewide disease rate
- In-kind resources to local health departments including condoms and lubricant and antibiotics to treat syphilis, gonorrhea, and chlamydia

971-673-0153 phone 971-673-0178 fax healthoregon.org/std

05/2015

Contact Information

STD RESOURCE GUIDES

Investigative Guidelines for HIV & STDs

Syphilis

Expedited Partner Therapy

Resources from the STD Program

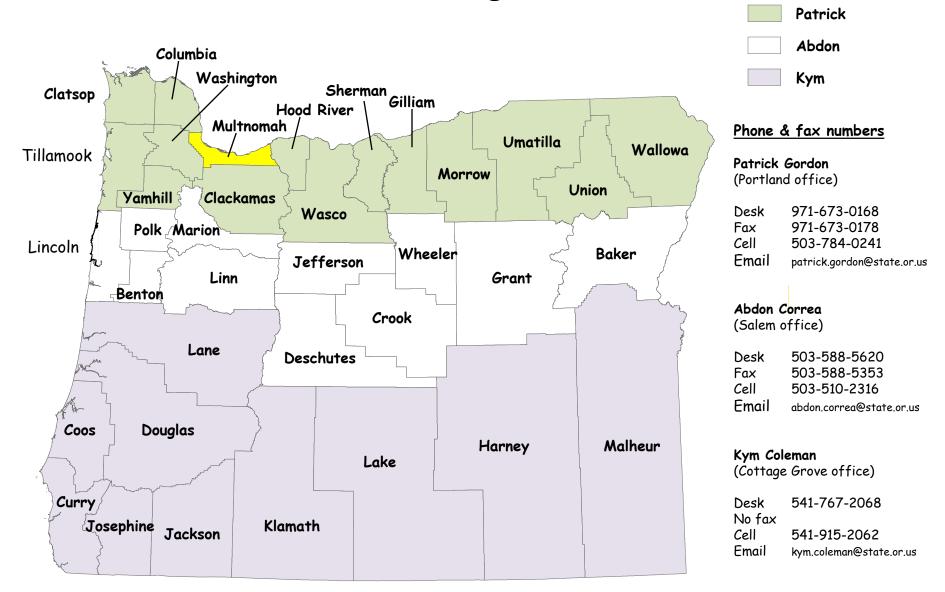
Orpheus HIV/STD Data Entry Guides

Oregon Health Authority – HIV & STD Prevention Who do I contact?

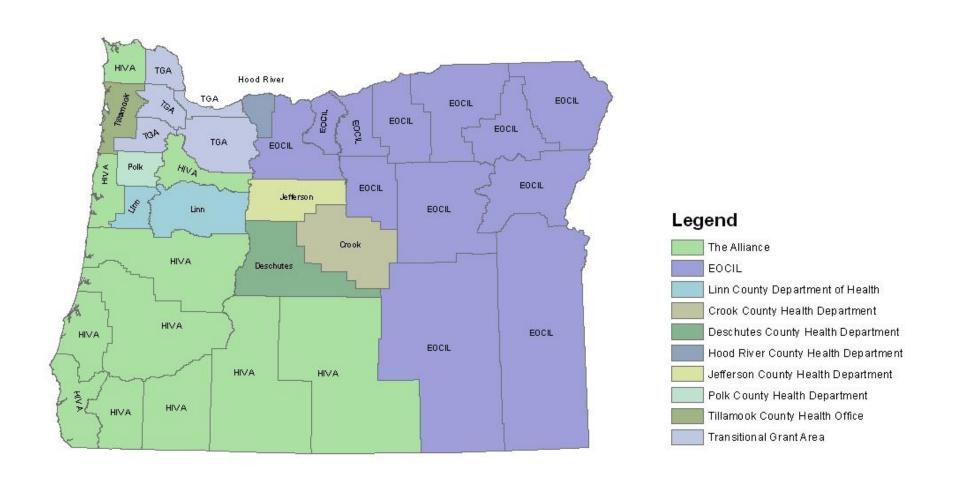
Staff from the Oregon Health Authority (OHA) HIV and STD Prevention Programs are available to provide technical assistance related to a variety of topics. Please see the table below with contact information as of June 15, 2015.

Name	Title	Program	Phone	Email	Primary contact for questions related to:
Josh Ferrer	Technical Consultant	STD/HIV Prevention	(971) 673-0149	joshua.s.ferrer @state.or.us	HIV/STD partner services, testing, STD treatment protocols, STD program condom distribution
Irina Kasarskis	Program Evaluator	STD/HIV Prevention	(971) 673-0165	Irina.m.kasarski s@state.or.us	HIV/STD testing data and program evaluation, sHIVer, Orpheus
Larry Hill	Program Development Analyst	HIV Prevention	(971) 673-0162	larry.d.hill@ state.or.us	HIV prevention program planning and capacity building assistance
Dano Beck	Technology Intervention Specialist	HIV Prevention	(971) 673-0170	daniel.w.beck@ state.or.us	Integrated Planning Group (IPG), HIV-related laws, Oregon Reminders, use of technology to support programs, HIV condom distribution
Warren Scott	Office Specialist	HIV Prevention	(971) 673-1161	warren.r.scott@ state.or.us	IPG travel and lodging, administrative operations, receives HIV test forms from non- funded counties for data entry
Steve Foye	Office Specialist	STD Prevention	(971) 673-0172	steven.l.foye@ state.or.us	Administrative operations, STD medications, STD lab results, STD condoms, CT and GC registry, inter-state communications of STD issues
Gary Fosnaugh	Administrative Specialist	STD Prevention	(971) 673-0152	gary.d.fosnaugh @state.or.us	Syphilis registry and Orpheus entry, inter-state communications of STD issues, STD medication orders, STD condoms
Abdon Correa	Disease Intervention Specialist (DIS)	STD Prevention	(503) 510-2316	abdon.correa@ state.or.us	HIV/STD case-specific questions and technical assistance for Lincoln, Polk, Benton, Linn, Marion, Jefferson, Crook, Deschutes, Wheeler, Grant and Baker counties
Patrick Gordon	Disease Intervention Specialist (DIS)	STD Prevention	(971) 673-0168	patrick.gordon @state.or.us	HIV/STD case-specific questions and technical assistance for Tillamook, Clatsop, Columbia, Washington, Yamhill, Clackamas, Hood River, Wasco, Sherman, Gilliam, Morrow, Umatilla, Union and Wallowa counties
Kym Coleman	Disease Intervention Specialist (DIS)	STD Prevention	(541) 915-2062	kym.coleman@ state.or.us	HIV/STD case-specific questions and technical assistance for Lane, Douglas, Coos, Curry, Josephine, Jackson, Klamath, Lake, Harney and Malheur counties
Ruth Helsley	HIV/STD Prevention Program Manager	STD/HIV Prevention	(971) 673-0867	ruth.helsley@ state.or.us	General program, policy and procedure questions, complaints, problem-solving needs, CDC requirements, funding

State DIS Assigned Counties



HIV Case Management Services, State of Oregon, 2015



COUNTIES OUTSIDE THE MET	ROPOLITAN AREA (05/2015))	
Counties	Agency	Contact	Phone
Coos, Curry, Douglas Jackson, Josephine, Klamath Lake, Lane, Marion, Lincoln, Clatsop	The Alliance www.hivalliance.org	Ask for intake coordinator	541-342-5088 1-866-470-3419
Baker, Gilliam, Grant Harney, Malheur, Morrow Sherman, Umatilla, Union Wallowa, Wasco, Wheeler	EOCIL www.eocil.org	Norma Munoz normamunoz@eocil.org Heidi Eidler heidieidler@eocil.org	Pendleton: 541-276- 1037/1-877-711-1037 Ontario: 541-889- 3119/1-866-248-8369
Linn/Benton	Linn County Dept of Health	Karen Fox kfox@co.linn.or.us	541-936-1771
Crook	Crook County Health Department	Katie Plumb kplumb@h.co.crook.or.us	541-447-5165
Deschutes	Deschutes County Health Department	Susan McCreedy susanmc@co.deschutes.or.us	541-322-7402
Hood River	Hood River County Health Department	Patricia Elliot trish.elliott@co.hood-river.or.us	541-386-1115
Jefferson	Jefferson County Health Department	Sarah Decker sarah.decker@co.jefferson.or.us	541-475-4456 x4222
Polk	Polk County Health Dept.	Cindy Rettler rettler.cindy@co.polk.or.us	503-623-8175 x2309
Tillamook	Tillamook County Health Office	Christi Sheppard csheppar@co.tillamook.or.us	503-842-3912

PORTLAND METRO AREA (05/2015)

Case management services are provided by multiple agencies in the Portland Metro Area. The agency will depend on where the client receives medical care. Call the <u>Oregon AIDS Hotline</u> for more information.

Counties	Phone	Email/Website
Clackamas, Columbia Multnomah, Washington and Yamhill counties in Oregon and Clark County in Washington	503-223-2437 800-777-2437 800-499-6940 en español	www.oregonaidshotline.com Online chat feature

1. DISEASE REPORTING

1.1 Purpose of Reporting and Surveillance

1. To assess trends in disease patterns, understand the impact of chlamydia and better target population-level disease prevention efforts.

1.2 Legal Reporting Requirements

- 1. Laboratories must report all positive test results indicative of Chlamydia infection to the Local Public Health Authority (LPHA) (OAR 333-018-0015 within one working day. Laboratories must report the name and telephone number of the reporting laboratory, the date the specimen was obtained, the name or description of the test and the test result. In addition, if the information is available to them, laboratories must report full name, date of birth, address, county, telephone number, and gender of the person from whom the specimen was collected, and the name, address and telephone number of the health care provider of the person from whom the laboratory specimen was obtained, and information required by the Oregon Health Authority's Manual for Mandatory Electronic Laboratory Reporting if electronic reporting is required under OAR 333-018-013.
- 2. Physicians and other reporters are required to report all laboratory-confirmed cases to the LPHA (OAR 333-018-0015).
 - a. In addition to their own name, address and telephone, reporters must report the name, address and telephone of the attending health care provider or treating health care provider, name, address and telephone of the affected person, and diagnosis or suspected condition and date of onset.
 - b. Reporters should be aware that LPHA's do not routinely notify sex partners (contacts) of chlamydia case-patients. Thus, practitioners should counsel patients to notify their partner(s), and give them information about testing and treatment for partners.

1.3 Local Public Health Authority Investigation Responsibilities

- 1. Review laboratory and health care provider case reports by the end of the calendar week in which initial laboratory or physician report is made. Report all confirmed cases to the Public Health Division HIV/STD/TB (HST) Program by recording the case in the Public Health Division's online integrated disease reporting system, Orpheus, or by faxing a completed case report form to HST. Paper case report forms can be found online at (http://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/ReportingCommunicableDisease/ReportingForms/Pages/index.aspx)
- 2. Oregon Health Authority does not require LPHA's to collect or report any additional case investigation beyond information included with initial laboratory or provider report (i.e., HST does not require provider or case interview.)
- 3. HST recommends that LPHA's that wish to understand local chlamyda epidemiology to inform or assess public health interventions consider interviewing a representative sample of patients with reported cases of chlamydia and their health care providers.

2.1 Etiologic Agent

Chlamydia trachomatis is a species of bacteria characterized by several subtypes, classified A through L. Subtypes D through K are the focus of this guideline because they are responsible for sexually-acquired genital infections in adults and perinatally transmitted infections in neonates and infants

2.2 Description of Illness

C. trachomatis subtypes D through K preferentially colonize columnar epithelial tissue. Sites of infection include the urogenital tract, rectum, pharynx, and occasionally the conjunctiva. Transmission from mother to newborn during childbirth is also possible. Asymptomatic infections are common among both men and women. Sexually transmitted Chlamydia infection manifests in men most commonly as urethritis, and in women as cervical infection. Symptomatic men might have mucopurulent urethral discharge, perhaps accompanied by dysuria, and women might have abnormal vaginal discharge, abnormal menses, pelvic pain, or dysuria. Serious complications include pelvic inflammatory disease (PID) and subsequent infertility or tubal pregnancy in women and epididymitis in men.

Untreated infections during pregnancy can result in premature delivery, including stillbirth. Newborns of women with untreated infection are at risk for conjunctival infection (opthalmia neonatorum) and chlamydial pneumonia. Rectal infections can produce proctitis in either men or women, especially those engaging in receptive anal sex. Pharyngeal infections occur with CT, but do not appear to play a significant role in disease or transmission.

Clinically, Chlamydia infections can be difficult to distinguish from gonorrhea. Simultaneous chlamydial and gonoccocal infections are not uncommon.

2.3 Reservoirs

Infected humans only.

2.4 Sources and Modes of Transmission

1. Sexual

The attack rate (proportion of exposed people who become infected) among exposed women is generally believed to be higher than the attack rate among exposed men. Non-sexual transmission among adults is unlikely. Anogenital or pharyngeal infection among infants and children should be investigated to rule out sexual abuse.

2. Mother to newborn child.

Neonatal infection results from exposure during birth to the mother's infected cervix. If resources are available, eye infections in an infant should be investigated to assure evaluation and treatment of the mother and any recent sex partners of the mother. (Section 4.)

2.5 Incubation Period

Incubation is typically 2–7 days but occasionally longer.

2.6 Period of Communicability

Unknown. Infected individuals are assumed to be infectious. Without treatment, infection can persist for months. Relapses are probably common from the time the infection is acquired until patient is adequately treated. Asymptomatic infected persons are believed to be as infectious as symptomatic individuals.

2.7 Treatment

- 1. Currently recommended treatment regimens include 1 g azithromycin orally in a single dose or 100 mg doxycycline orally twice daily for 7 days. Alternative treatments include levofloxacin 500 mg orally daily for 7 days or ofloxacin 300 mg orally twice daily for 7 days. (Doxycycline, levofloxacin and ofloxacin should not be presribed to pregnant women.) Refer to the current CDC STD Treatment Guidelines for alternative regimens or additional discussion of therapy at: http://www.cdc.gov/std/treatment.
- 2. These treatment regimens are not designed to be effective against gonorrhea. Concurrent chlamydial and gonoccocal infections do occur. If a man or women with laboratory confirmed chlamydia exhibits symptoms of gonorrhea, has a history of multiple sex partners within the previous six months, lives in a location or setting or belongs to a sociodemographic group among which gonorrhea is known to be

- prevalent, the patient should either be tested for gonorrhea if not tested at the time of chlamydia testing, or treated presumptively for gonorrhea.
- 3. Recent (within the past 60 days) sex partners should be evaluated, tested, and—if indicated—treated for chlamydial infection. If a sex partner will not agree to be tested, they should be treated presumptively with one of the above regimens.

3. CASE DEFINITIONS, DIAGNOSIS AND LABORATORY SERVICES

3.1 Confirmed Case (reportable to PHD)

Anyone from whom *C. trachomatis* is isolated or identified by a laboratory test from a specimen collected from an anogenital, pharyngeal, or conjunctival site. Culture, direct immunofluorescense, enzyme-linked immunoassay [EIA], nucleic acid hybridization tests, and nucleic acid amplification tests [NAAT] all suffice for detection and confirmation of *C. trachomatis*.

3.1 Presumptive Case

Do not use. If case does not meet confirmed case definition, use "no case" (in Orpheus) status to reflect investigation of an unconfirmed case. A presumptively treated sex partner of a confirmed case should not be considered to have a confirmed case unless a laboratory test confirms chlamydia in the partner.

3.3 Suspect Case

Do not use. If case does not meet confirmed case definition, use "no case" (in Orpheus) status to reflect investigation of an unconfirmed case.

3.3 Indeterminate or eq®uivocal lab results

Although providers may elect to treat a patient with an indeterminate or equivocal result, this is not considered a reportable case.

3.4 Services Available at the Oregon State Public Health Laboratory (OSPHL)

OSPHL offers combined NAAT testing for Chlamydia trachomatis and Neisseria gonorrheae to any practitioner providing they use the OSPHL bar-coded specimen order form. OSPHL can accept the following specimen types for testing: cervical swabs, urehtral swabs, clinician-collected vaginal swabs, patient-collected vaginal swabs*, clinician-collected rectal swabs, pharyngeal swabs, and urine. OS-PHL uses GEN-PROBE® APTIMA® target amplification nucleic acid probe test for *C. trachomatis*. GEN-PROBE® provides specific collection devices and transfer tubes that differ by anatomic source of specimen. Specimens must be collected with the correct collection device and transferred in the correct tube. For example, currently GEN-PROBE® provides a tube with a yellow label for urine, an orange tube and accompanying collection device for vaginal specimens, and a distinct tube and collection device for cervical, rectal, pharyngeal and urethral specimens. For information about specimen collection, order forms, handling and shipment, refer to the OSPHL web page (http://public.health. oregon.gov/LaboratoryServices/Pages/index.aspx) or by calling the client services coordinator at (503) 693-4100; fax (503) 693-5605.

*Self-collected vaginal swabs must be collected while the patient is at the clinic. Specimens collected at home by the patient will not be accepted.

4. ROUTINE CASE INVESTIGATION

4.1 Case Recording

All chlamydia cases reported by laboratory or by health care provider should be recorded in the state-wide disease reporting system, Orpheus, or reported to HST via fax. Nearly all chlamydia case reports arrive by electonic media from clinical laboratories, all of whom must report laboratory tests results indicative of and specific for *Chlamydia trachomatis* to the LPHA. These laboratory test result reports are found in the electronic laboratory reporting and processing functional modules of Orpheus. LPHAs must review and process these reports within 7 days of receipt, including a search of Orpheus for previous instances of reportable disease in the same individual. A new case should be created and related to the existing person in Orpheus if the same person is determined to have had a previously case of reportable disease. If the person cannot be found in Orpheus, a new person identity should be created in Orpheus in the course of entering the newly reported case.

Laboratory results reported directly to the LPHA or via fax or mail should be entered into Orpheus and a new case created as above. HST program staff or Orpheus technical spport can assist with Orpheus use if needed.

The minimum information necessary for recording a new case is first and last name, date of birth, sex, and collection date. If additional information is reported by the laboratory or provider, including but not limited to race, ethnicity, patient or provider address or county or telephone, these data should also be recorded in Orpheus. OHA does not require LPHAs to contact the laboratory, patient, or reporting physician to collect any unreported case information beyond first and last name, date of birth, sex, and collection date.

4.1 Supplementary Case Investigation and Response

LPHA's that choose to do so may interview case-patients or treating providers, or attempt to identify and treat sex partners of reported cases. However, none of these activities are strictly required. This is because limited public health benefit accrues from direct case-level public health intervention and many, perhaps the majority of cases of chlamydia are asymptomatic and not recognized, diagnosed or reported. Reported case volume exceeds 10,000 cases each year in Oregon. Therefore, interviewing every case-patient and treating provider and offering assistance with partner notification are practical impossibilities. Assurance of treatment is unnecessary in most reported cases. Assistance in notification of partners could only be offered to a minority of people with chlamydia. However, for LPHAs with sufficient interest, case burden and resources to collect information to guide prevention and policy and understand risk factors, OHA suggests a systematic sampling approach to interview a subset of reported cases and treating providers. (Sections 4.)

4.2 Sampling Cases for Interview

LPHAs that elect to interview some but not all patients are encouraged to interview a representative sample of reported case-patients, ideally randomly selected. HST program staff can assist the LPHA upon request in configuring Orpheus to select reported cases randomly for interview at a predetermined proportion. HST will suggest sample sizes based on interviewing capacity of the LPHA, desired precision of the estimate (width of the confidence interval for the estimate), estimated prevalence of the case characteristics of primary interest, and estimated number of reported cases per year in the jurisdiction. The table below offers some examples of recommended sample sizes by varying levels of these values to lend an idea of the likely interview burden in a particular LPHA.

Examples of recommended sample size by estimated prevalence of case characteristic*, desired precision**, and estimated annual number of reported cases in the LPHA.

Estimated Prevalence	Desired Precision	Estimated Annual Cases	Recommended Sample
10% (90%)	±5%	250	90
	±10%	250	31
	±5%	500	109
	±10%	500	33
	±5%	1000	123
	±10%	1000	34
	±5%	5000	136
	±10%	5000	35
20% (80%)	±5%	250	124
	±10	250	50
	±5%	500	165
	±10%	500	56
	±5%	1000	198
	±10%	1000	59
	±5%	5000	235
	±10%	5000	62
30% (70%)	±5%	250	141
	±10%	250	62
	±5%	500	197
	±10%	500	70
	±5%	1000	245
	±10%	1000	75
	±5%	5000	304
	±10%	5000	80
40% (60%)	±5%	250	150
	±10%	250	68
	±5%	500	213
	±10%	500	<i>7</i> 9
	±5%	1000	270
	±10%	1000	86
	±5%	5000	344
	±10%	5000	92

^{*}Might be a demographic characteristic such as race, a treatment outcome such as patient delivered partner therapy, or a behavioral question such as >1 recent sex partner.

^{**}Width of confidence interval.

4.3 Patient Interview

- 1. Case-patient interviews are neither expected nor required. Should LPHA elect to interview cases, Orpheus contains suggested questions, and responses can be entered directly into Orpheus. These are found on the "Risk" and "Followup" tabs within the case report. Partner information and disposition can be entered within the "Contacts" tab.
- 2. As resources allow, including upon request of the diagnosing practitioner, the patient interview might also include: patient education about transmission and prevention, reminder to refrain from sexual activity until 7 days after both patient and partner are treated, assistance to patient and partner to access and complete treatment as necessary, and reminder to patients to retest for chlamydia 3 months after treatment.

4.4 Provider Interview

1. Provider interviews are neither expected nor required. Should LPHA elect to interview providers, Orpheus contains suggested questions, and responses can be entered directly into Orpheus. These are found on the "Clinical" and and "Followup" tabs within the case report.

4.3 Managing Sexual Partners

- 1. Contact investigation and partner notification are neither expected nor required; however, LPHA may provide these services at its discretion, using standard partner follow-up methods. Patient confidentiality must be preserved throughout the follow-up process. Telephone contact and interview or face-to-face approaches are acceptable. Electronic communication such as text and email might be acceptable alternatives if confidentiality, privacy and security can be reasonably assured. Check with your manager or local health department administrator for guidance about permissibility of these alternative electronic communication methods for interviewing chlamydia cases. Contact information and disposition should be entered in Orpheus using the "Contacts" tab.
- 2. Where resources allow, LPHAs may elect to test and treat sex partners of confirmed cases who seek this. Ideally, all sex partners within 60 days prior to the patient's positive test should be examined and tested for chlamydia and treated. If a case has not had sex in the 60 days preceding their lab-positive test, the most recent sex partner should be examined and tested, if possible, and treated.
- 3. Sexual partners being tested and treated for Chlamydia should be offered testing for *Neisseria gonorrhea*, Human Immunodeficiency Virus, and syphilis. In addition, consider testing for hepatitis B and genital herpes if indicated.
- 4. If, as is currently the reality with most reported cases chlamydia, provider or health department assistance with partner referral and treatment is unlikely to be available, the health care practitioner should be encouraged to give additional medicine or a prescription for chlamydia to a heterosexual patients to deliver to their partner or partners. This practice is known as patient delivered partner therapy, expedited partner therapy, or "EPT." Because of the high prevalence of undetected HIV and other sexually transmitted infections among male partners of men who have sex with men, there is a competing urgency to test partners of men who have sex with men for HIV, gonorrhea and syphilis. For these reasons, EPT should not be encouraged for men who have sex with men. Instead partners of men diagnosed with chlamydia who have sex with men should be strongly encouraged to be examined directly, tested for chlamydia, gonorrhea, syphilis and HIV and treated presumptively for chlamydia. Except for cases among men who have sex with men, EPT should be strongly encouraged whenever a provider determines that sex partners of the case are unlikely to seek out or successfully obtain timely medical evaluation and treatment. Information about expedited partner therapy in Oregon, including partner education materials in English and Spanish for distribution to patients, is available at the HST website (http://oregon.gov/DHS/ph/std/partnertherapy. shtml). Oregon's Board of Pharmacy (http://www.pharmacy.state.or.us/) has additional information about EPT for pharmacists.

Among the two alternative recommended treatment regimens for primary treatment of chlamydial infection, only the single dose azithromycin regimen is recommended for EPT.

If possible and practical, telephone contact should be made with the sexual partner(s) to whom EPT has been directed to explain the reason for providing EPT, to ask about other symptoms of STDs or complications that would indicate a need for medical evaluation, and to answer questions. Of course, direct medical examination of sex partners, including testing for chlamydia and for other sexually transmitted diseases, followed by treatment for all presumed infections remains the preferred approach to assuring treatment of exposed partners.

6

EPT should be used for first-generation partners only (direct sexual contacts with the case). Other partners of a case's partner should be encouraged to seek medical evaluation, especially if they are experiencing symptoms of a sexually transmitted infection. More information about the rationale for this recommendation is available at the HST website.

Health care providers should document all EPT-related actions, including the number of partners who are being provided with EPT, the medication(s) and dosage prescribed or provided, whether or not the partners are known to be allergic to any medications, and the information sent along for the partner(s).

- 5. Out-of-county contacts. In the occasional instance when LPHA is called upon to assist with partner notification with an out-of-jurisdiction contact (including out-of-state), this information should be relayed to the communicable disease section of the Local Health Authority of the county where the patient resides if the patient is an Oregon resident or to Oregon Sexually Transmitted Disease (STD) Program at (971) 673-0153 if the patient resides outside of Oregon. The STD Program will pass this information to the appropriate county or state to initiate follow-up.
- 6. The health practitioner may request additional assistance from the LPHA for any case. LPHA may assist as circumstances and resources allow. The LPHA may contact HST for assistance at its discretion. Examples of circumstances that might prompt a health practitioner to request additional assistance include but are not limited to: the patient is a man who has sex with other men; the practitioner wants to assure of treatment of a pregnant patient and her partners; assistance with partner notification in circumstances where a patient is unwilling to notify partners; more than 2 partners require notification and treatment.

4.4 Documentation

Information collected by case interview should be reported to the Sexually Transmitted Disease Program via the online integrated disease reporting system, Orpheus

5. CONTROLLING FURTHER SPREAD

5.1 Education

Patients should:

- Refrain from sexual activity until 7 days after both patient and partner are treated;
- Use condoms if sexually active;
- Refer all partners for treatment;
- See their provider if symptoms persist or emerge in either patient or partner;
- Return for retest for Chlamydia within 3 months after treatment whether symptomatic or not.

(In most instances this patient education will be delivered by the treating provider as most case-patients won't have contact with LPHA.)

5.2 Case Follow-up

Every person with a reported case of chlamydia should be advised to seek medical attention for persistent symptoms and to seek additional testing for Chlamydia three months after treatment for purposes of identifying persistent infections and repeat infections.

5.3 Managing Special Situations

Pregnancy

Doxycycline, ofloxacin and levofloxacin are contraindicated in pregnant women.

In most situations, repeat testing to document chlamydial eradication ("test of cure") is not necessary nor recommended. However repeat testing to document eradication, preferably with a nucleic acid amplification test, *should be done* about 3 weeks after completion of therapy in pregnant women to ensure therapeutic cure because maternal and infant sequelae of unsuccessful treatment can be severe. In addition, as with other patients, pregnant women who have been treated previously for chlamydia should have repeat testing 3 months after treatment. Pregnant women who have previously been treated for chlamydia, are aged <25 years or have more than one sex partner should also have repeat testing during the third trimester.

Call the Public Health Division Sexually Transmitted Disease Program for assistance with special situations at (971) 673-0153.

6. APPLICABLE RULES

6.1 Reporting

OAR 333-018-0000 through 333-018-0020

6.2 Investigation

OAR 333-019-0000 and 333-019-0002

7. UPDATE LOG

April 2014 Drafted. (Schafer)

June 2014 Revised based on CLHO Feedback (Schafer)

August 2014 Revised based on CLHO Feedback—revised list of information items that must be reported

by laboratories; added information about repeat testing during pregnancy. (Schafer)

1. DISEASE REPORTING

1.1 Purpose of Reporting and Surveillance

- 1. To assess trends in disease patterns, understand the impact of gonorrhea and better target population-level disease prevention efforts.
- 2. To assure adequate treatment for infected individuals to curtail infectiousness, prevent infection sequelae (e.g., infertility), and address drug resistance risk.
- 3. To identify, contact, and refer to treatment recent sexual contacts of reported cases.

1.2 Legal Reporting Requirements

- 1. Physicians and other health care providers must report a case or suspected case of gonorrhea within one working day to the Local Public Health Authority (LPHA) (OAR 333-018-0015).
- 2. Laboratories must report all positive test results indicative of Neisseria gonorrhoeae infection to the local health department of the county where the individual resides within one working day from the time of positive result.

1.3 Local Health Jurisdiction Investigation Responsibilities

- 1. Begin follow-up case investigation within 2 working days after receiving the case report.
- 2. Report all presumptive and confirmed cases to the Public Health Division HIV/STD/TB (HST) Program by the end of the calendar week of initial physician or laboratory report by completing the case report directly in the Public Health Division's online integrated disease reporting system, Orpheus, by submitting a completed copy of the Gonorrhea case report form available from the HST website, or by submitting an electronic file in mutually acceptable format that includes all information indicated collected by the case entry layout in Orpheus.

2. THE DISEASE AND ITS EPIDEMIOLOGY

2.1 Etiologic Agent

Neisseria gonorrhoeae, a gram-negative, diplococcoid bacterium.

2.2 Description of Illness

- 1. Infections caused by *N. gonorrhoeae* preferentially colonize columnar epithelial tissue. Potential sites of infections include the urethra, endocervix, rectum, pharynx, and occasionally the conjunctiva of the eye, especially as a result of mother to newborn transmission. Infections caused by drug-resistant types are clinically indistinguishable from those caused by drug-susceptible types. Both males and females might be asymptomatic. Symptomatic males with urethral infections usually have purulent (containing pus) urethral discharge, often accompanied by dysuria (painful urination). Males or females who have engaged in receptive oral or rectal sex may notice pharyngeal (throat) or rectal symptoms. Females may have abnormal vaginal discharge, abnormal menses, pelvic pain, or dysuria.
- 2. Serious complications of gonococcal infection include pelvic inflammatory disease (PID) and subsequent infertility or tubal pregnancy in females and epidymitis (inflamed sperm ducts around the testicles) and

urethral stricture in males. Disseminated gonococcal infection (DGI) may occur in either sex. Untreated GC infection during pregnancy may result in premature delivery. Newborns of females with untreated GC infection are at risk for opthalmia neonatorum (eye infection) and disseminated infections.

3. Clinically, gonorrhea can be difficult to distinguish from chlamydia. Combined gonococcal and chlamydial infections are not uncommon.

2.3 Reservoirs

Infected humans only.

2.4 Sources and Modes of Transmission

1. Sexual

The attack rate (proportion of exposed people who become infected) among exposed women is generally believed to be higher than the attack rate among exposed men. Non-sexual transmission among adults is unlikely. Anogenital or pharyngeal infection among infants and children should be investigated to rule out sexual abuse.

2. Mother to newborn child.

Neonatal infection results from exposure during birth to the mother's infected cervix. Eye infection in an infant should be investigated to assure evaluation and treatment of the mother and any recent sex partners of the mother.

2.5 Incubation Period

Incubation is typically 2-7 days but occasionally longer.

2.6 Period of Communicability

Gonorrhea is communicable from the time the infection is acquired until the patient is adequately treated. Effective treatment ends communicability within hours. Asymptomatic infected persons are generally considered to be equally infectious as symptomatic individuals.

2.7 Treatment

1. Uncomplicated infections of the pharynx, cervix, urethra, or rectum

Ceftriaxone 250 mg in a single intramuscular dose

PLUS

Azithromycin 1 g orally in a single dose or doxycycline 100 mg orally twice daily for 7 days

2. If ceftriaxone is unavailable or unfeasible

Cefixime 400 mg orally in a single dose

PLUS

Azithromycin 1 g orally in a single dose or doxycycline 100 mg orally twice daily for 7 days PLUS

A follow-up laboratory test for gonorrhea in 1 week, also known as "test-of-cure."

3. If the patient has a severe cephalosporin allergy

Azithromycin 2 g orally

PLUS

A follow-up laboratory test for gonorrhea in 1 week, also known as "test-of-cure."

3. CASE DEFINITIONS, DIAGNOSIS AND LABORATORY SERVICES

3.1 Confirmed Case Definition (reportable to PHD)

Anyone from whom *N. gonorrhoeae* is isolated or identified by a laboratory test from a specimen collected from an anogenital, pharyngeal, or conjunctival site. Culture, direct immunofluorescense, enzyme-linked immunoassay [EIA], nucleic acid hybridization tests, and nucleic acid amplification tests [NAAT] all suffice for detection and confirmation of *N. gonorrhoeae*.

3.2 Presumptive Case (reportable to PHD)

Observation of gram-negative intracellular diplococci by microscopy of a specimen collected from a person with signs or symptoms consistent with gonococcal infection,

OR

A diagnosis of gonorrhea submitted made by a physician or other licensed health care provider,

3.3 Suspect

Signs or symptoms of gonorrhea in a sexually active person or someone who has been sexually assaulted.

Sexual contact with a laboratory-confirmed case within 60 days preceding the treatment of the laboratory confirmed case.

(Exposed sexual contacts that can be located should be treated as "presumptive" cases with the same treatment that would be used for a confirmed case (§2.F.). Case reports needn't be completed for suspect cases though information about sexual contacts to confirmed cases should be collected and recorded as described below (§4.C.). If laboratory evidence of Neisseria gonorrhoeae subsequently becomes available for a suspect case, a case report should be completed and the recorded as confirmed case.)

3.4 Services Available at the Oregon State Public Health Laboratory (OSPHL)

OSPHL performs evaluation and identification of Neisseria gonorrhoeae from swabs of the pharyngeal, rectal, urethral or cervical mucosa collected by a physician or other health care provider and from samples of urine using nucleic acid amplification testing. Upon request, OSPHL will attempt to culture N. gonorrhoeae from specimens collected from any of the above anatomic sites.

OSPHL does not routinely conduct susceptibility testing of N. gonorrhoeae isolates. Contact the STD Program (971-673-0153) to discuss arrangements for susceptibility testing if you suspect failure of treatment with one of the recommended treatment regimens.

For information about specimen collection, handling, and shipment, refer to the OSPHL "Guide to Services" or contact the lab at (503) 693-4100; fax (503) 693-5605.

4. ROUTINE CASE INVESTIGATION

4.1 Provider Interview

Contact the health care provider to verify treatment, complete missing, ambiguous, or erroneous elements of the initial case report and inform the provider if you plan to contact the case-patient directly for interview. A provider interview can be done by telephone, or paper case report forms can be faxed or delivered online for completion by the provider.

It is not uncommon for one local health authority to receive a laboratory report for someone who, it turns out, lives in another county. This can happen when a clinical laboratory doesn't know the county of residence of the patient and supplies the county where the provider or laboratory is located instead. If local public health staff happen to make contact with a health care provider or facility, only to learn that the case doesn't reside in his or her county, we encourage effort to collect the information necessary to complete any information from the provider necessary for the case report on behalf of colleagues. This saves time and aggravation for everyone involved. After completing the report, transfer the case in Orpheus to the county of residence of the case or make a courtesy call to colleagues in the county of residence of the case to advise them of the new case if the LHD doesn't use Orpheus for reporting gonorrhea data.

4.2 Patient Interview

A confidential interview should be attempted for all confirmed cases. Client privacy should be carefully guarded and ensured, and confidentiality of information preserved throughout the interview and case investigation. Telephone and face-to-face approaches are acceptable. Electronic communication such as text and email might be acceptable alternatives if confidentiality, privacy and security can be reasonably assured. Check with a manager or local health authority administrator for guidance about permissibility of these alternative electronic communication methods for interviewing gonorrhea cases.

In cases where the client is aged <13 years, speak with the parent or legal guardian first. Exercise professional judgment about the need to interview the child separately or in the presence of the parent or guardian.

4.3 Managing Sexual Partners

All sex partners within 60 days prior to the client's positive laboratory test should be examined and tested for gonorrhea if possible, and treated. If a client has not had sex in the 60 days preceding his or her positive laboratory test, the most recent sex partner should be examined and tested, if possible, and treated.

During the confidential interview, ask the patient for the names and contact information of everyone with whom the case has had sexual contact within the 60 days (-two months) preceding the date of diagnosis or first positive laboratory test for gonorrhea. If the case denies any sex partners within the previous 60 days, record the name and contact information for the most recent sex partner regardless of the interval since most recent sexual contact. Remember to collect from the case if known, the partner's nicknames, address, telephone numbers including cell phones, email addresses, race, sex, age, primary language spoken and earliest and most recent dates of sexual contact, for each sex partner recorded.

Using available information, named sexual contacts should be contacted within 2 working days of the initial case interview by telephone, field (in-person) visit, or other method, and referred to their local health department or another health care provider for evaluation, testing, and treatment. Generally, LHD staff should try to contact the sex partner 3 times before determining that the partner cannot be located. Attempts should be made to contact the partner on alternate days and times of day. When possible, alternate contact method should also be tried. For example, if telephone calls have not been successful, an in-person (field) visit should be considered. If the client prefers to refer the partner, health department staff should determine how they will verify that the partner has been examined or treated. If the contact's treatment cannot be verified within a reasonable time frame (2–5 days), health department staff should attempt to notify and refer the partner for examination and treatment. If locating information is not available for the sex partner, health department staff should call the client for additional information.

When a partner is reached, all outstanding personal information indicated by the "Contacts" tab of the Orpheus case entry form or on the contacts section of the paper form not previously provided by the health care provider should be collected and any that the health care provider reported should be confirmed. The date and outcome of each attempt to interview each partner should be recorded along with the dates and results of any laboratory tests conducted and the dates and details of any presumptive treatment or treatment of laboratory-confirmed infection. When the attempt to notify and treat the partner have been completed the date and outcome (disposition) of the efforts (e.g., "infected, brought to treatment," "unable to locate," "refused preventive treatment," etc.) should be recorded and any additional useful information collected retained.

If the health care practitioner judges that one or more sex partners of the diagnosed patient are unlikely to seek or successfully obtain timely medical evaluation and treatment, they may give additional medicine or a prescription for gonorrhea treatment to heterosexual patients to deliver to their partner(s). This practice is known as patient delivered partner therapy, expedited partner therapy, or "EPT." Except for cases among men who have sex with men, EPT should be strongly encouraged whenever a provider determines that sex partners of the case are unlikely to seek out or successfully obtain timely medical evaluation and treatment.

Because of the high prevalence of undetected HIV and other sexually transmitted infections among male partners of men who have sex with men, there is a competing urgency to test partners of men who have sex with men for HIV, chlamydia and syphilis. For these reasons, EPT should not be used for men who have sex with men. Instead partners of men diagnosed with gonorrhea who have sex with men should be strongly encouraged to be examined directly, tested for chlamydia, gonorrhea, syphilis and HIV and treated presumptively for gonorrhea.

Information about expedited partner therapy in Oregon, including partner education materials in English and Spanish for distribution to patients, is available at the HST website (http://oregon.gov/DHS/ph/std/partnertherapy.shtml). Oregon's Board of Pharmacy (http://www.pharmacy.state.or.us/)

has additional information about EPT for pharmacists.

With EPT, the recommended treatment for gonorrhea consists of:

Cefixime 400 mg orally in a single dose

PLUS

Azithromycin 1g orally in a single dose

Patients with gonorrhea and their partners who are seen *in-person* should be treated with the first line recommended treatment: ceftriaxone (250 mg intramuscularly) in addition to azithromycin (1g orally). The second line treatment, Cefixime, is recommended for EPT because it is taken orally.

If possible and practical, telephone contact should be made with the sexual partner(s) to whom EPT has been directed to explain the reason for providing EPT, to ask about other symptoms of STDs or complications that would indicate a need for medical evaluation, and to answer questions. Of course, direct medical examination of sex partners, including testing for gonorrhea and for other sexually transmitted diseases, followed by treatment for all presumed infections remains the preferred approach to assuring treatment of exposed partners.

EPT should be used for first-generation partners only (direct sexual contacts with the case). Other partners of a case's partner should be encouraged to seek medical evaluation, especially if they are experiencing symptoms of a sexually transmitted infection. More information about the rationale for this recommendation is available at the HST website.

Health care providers should document all EPT-related actions, including the number of partners who are being provided with EPT, the medication(s) and dosage prescribed or provided, whether or not the partners are known to be allergic to any medications, and the information sent along for the partner(s).

Sexual partners being tested and treated for N. gonorrhoae should be offered testing for Human Immunodeficiency Virus (HIV), and syphilis. In addition, consider testing for hepatitis B and genital herpes if indicated.

4.4 Documentation

Information collected by case interview should be reported to the Sexually Transmitted Disease Program via the online integrated disease reporting system, Orpheus, or by submitting a completed copy of the paper case investigation and interview record form. Local health authorities that wish to use an independent, locally-developed and maintained database to collect and manage gonorrhea-related case data must make arrangements with the STD Program to securely submit electronic files containing case report data in mutually agreeable format. After the case report information has been entered into Orpheus, any paper forms can be destroyed. If it is necessary to contact multiple facilities where treatment was rendered, make a note of this in the area reserved for notes in the Orpheus case report.

If using Orpheus:

Enter information collected from the client into the appropriate areas of the Orpheus case report interface — Basic, Risk and Clinical and Follow-up tabs. If the client provides personal (non-clinical) information such as demographic or sexual exposure history that contradicts information collected from health care provider/s, overwrite the provider response with the client response and make a note of the change in the notes section of the Orpheus case report.

Record information about contacts directly into the "Contacts" and related sub-tabs of the case entry interface. Use the "+ Contact" button on the "Contacts" tab of the Orpheus case report to add each new contact. Alternatively, you can record the contact information on the paper case report form for later transfer into Orpheus, or into your local database. This list should include all partners within the 60-day exposure period including those from whom the client might have acquired infection and others whom the client might have exposed.

Enter partner information in the "Demographics" sub-tab of the "Contacts" tab. Be sure that the name of the partner about whom you wish to enter information has been highlighted in the right side of the "Contacts" tab before entering data in any of the sub-tabs. Record the date of the first sexual encounter between this partner and the client and the date of the most recent encounter in the "Exposure" sub-tab of the "Contacts" tab. Record the date and outcome of each attempt

to interview each partner and record this information in the "Notes" sub-tab of the "Contacts" tab of the Orpheus case entry interface. Record the outcome of efforts to contact the partner in the exposure sub-tab of the contacts tab of the Orpheus case entry form. Record the dates and results of any laboratory tests conducted and the dates and details of any presumptive treatment or treatment of laboratory-confirmed infection in the "Labs & Treatment" sub-tab. Record the date and final outcome (disposition) of your efforts (e.g., "infected, brought to treatment," "unable to locate," "refused preventive treatment," etc.) in the "Contacts" tab of the case entry form. Retain any useful information in the "Notes" sub-tab of the "Contacts" tab of the Orpheus case entry form.

5. CONTROLLING FURTHER SPREAD

5.1 Education

During the interview, clients should be counseled to take all prescribed medications as directed, abstain from sex for at least seven days after completion of treatment, and until seven days after partners have been treated, to discontinue sex with any untreated sex partners, and to use condoms to reduce the risk of acquiring sexually transmitted infections in the future. Counseling should be personalized to the client by taking a "client- centered" approach. In general, sexually transmitted disease interviews involve a single encounter with the client, so the focus of the interview, by necessity, must be fairly narrow. Give attention to those behaviors that the client seems willing or able to change.

5.2 Case Follow-up

Every individual with a reported case of gonorrhea should be advised to seek medical attention for persistent symptoms and to seek additional testing for gonorrhea 10 weeks after treatment for purposes of identifying persistent infections and repeat infections.

5.3 Managing Special Situations

Call the Public Health Division Sexually Transmitted Disease Program for assistance with special situations at (971) 673-0153.

Suspected treatment failure. If you encounter or become aware of a case in which symptoms fail to resolve completely within 1–3 days of treatment with one of the recommended treatment regimens, this might represent treatment failure resulting from a resistant strain of N. gonorrhoeae. Please contact the STD Program within 24 hours for advice about additional investigation of possible emergence of new strains of resistant *N. gonorrhoeae*.

6. APPLICABLE RULES

6.1 Reporting

OAR 333-018-0000 through 333-018-0020

6.2 Investigation

OAR 333-019-0000 and 333-019-0002

UPDATE LOG

January 2014 Created. (Schafer)

December 2014 Revised to include information on EPT. (Schafer)

Gonorrhea		Orpheus ID		County
Date investigation initiated or assigned Date reported to local health department Completed by	t/		☐ suspect	no case
CASE CONTACT INFORMATI Name			cell / work / message	
Street City Zip ALTERNATE CONTACT: Parent				
Name Address Street		home /	cell / work / message	
DEMOGRAPHICS DATE OF BIRTH//	HISPANIC □ yes □	no □ unknown □ declined	Case reported by:	
or, if unknown, AGE SEX □ female □ male □ trans-MTF □ trans-FTM	RACE White Black D Native Hawaiian/Paci	ific Islander Naska native	Name, phone, other cont	
Country of birth	☐ refused to answer ☐		Name, phone, other contact info OK to contact patient (only list once)	
BASIS OF DIAGNOSIS (FROM CLINICAL DATA Diagnosis date/ Symptomatic? yes no unkno	LABORATO Test 1 Lab Name: Specimen: Test: □ c Result: □ Test 2 Lab Name: Specimen: Test: □ c Result: □ Test 3 Lab Name: Specimen: Test 3	Test Date:Test Date:Test Date:Test Date:Test Date:Test Date:Test Date:	vaginal rectal the rocal unknown	roat 🗆 urine 🗖 other
At the time of infection was the patient also diagnosed with? Y N R U Colored Chlamydia Colored Chla				

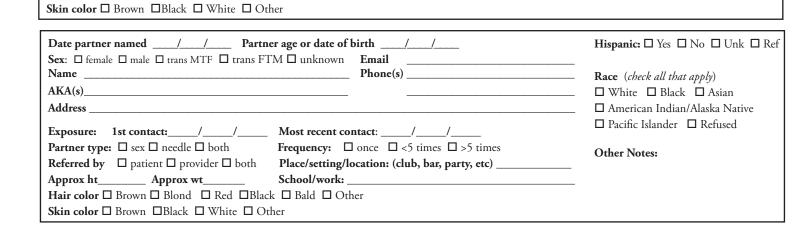


	PATIENT'S NAM	ME		
PATIENT TREATMENT (F	ROM PROVIDER OR CASE INTERVIEW)			
Treatment Treatment 1 Date:// Drug: □ azithromycin □ cefixime	size (mg)	dose (tablet	s/pills)	frequency/duration
Treatment 2 Date:// Drug: □ azithromycin □ cefixime	□ ceftriaxone □ other			
Treatment 3 Date://_ Drug: □ azithromycin □ cefixime	□ ceftriaxone □ other			
	ND RISKS (BASED ON CASE INTERVIEW OR Friewed:ed (R); unknown (U)	FROM PROVIDER II	F AVAILABLE	
		Y N R U		
Has the case ever had sex with a male?		0000		
	If yes,			
	Number of male partners in past 12 months?		□1 □2-5 □>	5 □R □U
	How many were of these were new male partners (with whom the case never had sex prior to 12 months ago)?	e had	□ 1 □ 2–5 □ >	5 🗆 R 🗆 U
	Number of male partners during past 12 months whom the case does and whom the case wouldn't know how to contact except by chance?	n't know	□1 □2-5 □>	5 🗆 R 🗆 U
Has the case ever had sex with a female?				
	If yes,			
	Number of female partners in past 12 months ?		□1 □2-5 □>	5 🗆 R 🗆 U
	How many were of these were new female partners (with whom the cannever had sex prior to 12 months ago)	ase had	□1 □2-5 □>	5 🗆 R 🗆 U
	Number of female partners during past 12 months whom the case doo know and whom the case wouldn't know how to contact except by ch		□1 □2-5 □>	5 🗆 R 🗆 U
Has the case ever had sex in exchange for money or drugs?				
Has the case ever used recreational drugs, including intravenous drugs or skin popping?		0000		
During the past 12 months has the case used Internet or phone apps to find new sex partners?				
	If yes,			

List all sites:



	PATIENT'S NAME	
CONTACTS Ask about contacts (sexual, needle-sharing, etc.) within 60 sary. For each contact, complete a copy of the contact inte	O days of onset or diagnosis if asymptomatic. List below name and contact	ct information for all contacts. Duplicate this page as neces-
Date partner named/ Partr Sex: □ female □ male □ trans MTF □ trans F Name AKA(s) Address Exposure: 1st contact:/_/ Partner type: □ sex □ needle □ both Referred by □ patient □ provider □ both	mer age or date of birth/ TM □ unknown	Hispanic: □ Yes □ No □ Unk □ Ref Race (check all that apply) □ White □ Black □ Asian □ American Indian/Alaska Native □ Pacific Islander □ Refused Other Notes:
Approx ht Approx wt Hair color □ Brown □ Blond □ Red □ Black Skin color □ Brown □ Black □ White □ O	ck □ Bald □ Other	
NameAKA(s)Address	TM □ unknown Email Phone(s)	Race (check all that apply) □ White □ Black □ Asian □ American Indian/Alaska Native □ Pacific Islander □ Refused Other Notes:
Name	TM unknown Email Phone(s)	Race (check all that apply) □ White □ Black □ Asian
Referred by □ patient □ provider □ both Approx ht Approx wt	Place/setting/location: (club, bar, party, etc)School/work:	——————————————————————————————————————



Hair color □ Brown □ Blond □ Red □ Black □ Bald □ Other



Complete a copy of this page for EV	ERY partner interviewed.	PARTNER'S NAME		
PARTNER EXPOSURES	S AND RISKS (BASED ON CASE	INTERVIEW OR FRO	M PROVIDER	R IF AVAILABLE)
· ·	rerviewed:			
Check all that apply: yes (Y); no (N); re	fused (R); unknown (U)			
			Y N R U	
Has the contact ever had sex with a male?				
	If yes,			
	How many different males has contact had sex months?	with during preceding 12		□1 □2–5 □>5 □R □U
	With how many of these male partners during contact have oral, anal or vaginal sex without t			□1 □2–5 □>5 □R □U
Has contact ever had sex with a female?				
	If yes,			
	How many different females has contact had somonths?	ex with during previous 12		□1 □2-5 □>5 □R □U
	With how many of these female partners durin contact have oral, anal or vaginal sex without t			□1 □2–5 □>5 □R □U
Has contact ever had sex in exchange for drugs or money?				
Has contact ever been tested for HIV?				
	If yes,			
	Result			□ Pos □ Neg □ Indeterminat □ Unk □ Ref
	Approximate month and year of last test			
Do you ever find sex partners on the Internet?				
	If yes,			
	List the sites			
At which of the following locations has contact had sex during the previous 12 months?			☐ Bathhouse ☐	ate residence
Complete a copy of this page for every p Test Test 1 Collection date://_ Source: □ cervix □ throat □ rec Type: □ culture □ nucleic acid am Result: □ positive □ negative □ in	rum □urine □urethra □ other plicification test □ other ndet. □ unk	Test 2 Collection date Source: □ cervix □ Type: □ culture □ Result: □ positive	□ throat □rectum I nucleic acid amplic	□urine □urethra □ other ification test □ other
Treatment Treatment 1 Date://	「 (FROM PROVIDER OR PARTN □ ceftriaxone □ other	size (mg)	dose (table	ets/pills) frequency/dur
Freatment 2 Date://_ Drug: □ azithromycin □ cefixime	□ ceftriaxone □ other			
DISPOSITION	COMMENTS			
A -Preventive Treatment B - Refused Preventive Treatment C - Infected, Brought to Treatment D - Infected, Not Treated E - Previously Treated for tthis Infected G - Insufficient Information to Beg H - Unable to Locate J - Located, Refused Examination K - Out of Jurisdiction L - Other				

1. DISEASE REPORTING

1.1 Purpose of Reporting and Surveillance

- 1. To assess trends in disease patterns, understand the impact of syphilis and better target population-level disease prevention efforts.
- 2. To assure adequate treatment for infected individuals, curtail infectiousness, and prevent complications of late syphilis (e.g., late neurologic complications, cardiovascular disease).
- 3. To prevent congenital syphilis by screening and treatment of infected pregnant women.
- 4. To prevent transmission by identifying, informing, and referring to treatment recent sexual contacts of reported cases, and screening others at risk.

1.2 Legal Reporting Requirements

- 1. Physicians and other health care providers must report a case or suspected case of syphilis within one working day to the Local Health Department (LHD) (OAR 333-018-0015).
- 2. Laboratories must report all positive test results indicative of *Treponema pallidum* infection to the LHD of the county where the individual resides within one working day from the time of positive result. Reportable results are tests indicated of syphilis, including but not limited to non-treponemal and treponemal serologic tests. (§2.3)

1.3 Local Health Department Investigation Responsibilities

- 1. Begin follow-up case investigation within 2 working days after receiving the case report.
- 2. Upon receipt of reactive serologic test results for syphilis, but before initiating a new case report, search for a record of the person in the Public Health Division's online integrated disease reporting system (Orpheus) or contact the STD Registry Clerk, Public Health Division Sexually Transmitted Disease Control Program for assistance with this task. (971-673-0152) If the person has a record in Orpheus, check whether the person has an associated syphilis case report or "reactor case." (Registry or cases can be distinguished by an "R" in the co-morbidity panel of Orpheus case entry.) All individuals recorded in Orpheus with one or more presumptive or confirmed cases of syphilis should have one and only one registry case. A registry case is a trick used by Orpheus developers to make longitudinal serologic titers visible across multiple acute or recurrent cases of syphilis and to record periodic titers from someone who was successfully treated long ago but has persistently measurable titers, or has recurrent falsely reactive tests. Each person who has a past case of confirmed or presumptive syphilis of any stage should also have a registry case. If one is not present for that person, contact the STD program for assistance in creating a registry case for this person if you don't already know how to do this yourself. If a registry case, or past presumed or confirmed syphilis case of any stage is present, a newly received positive test might represent persistent reactive serology after previous treated syphilis infection or a persistent false positive test. If you can verify that a person was previously treated for syphilis and the current titer is less than 2 dilutions higher than the titer after treatment (or than the previous titer if the person has been determined to be a "reactor"), enter the current result in the laboratories associated with the registry case in Orpheus and move on to your next task. (\$2.3) If your LHD uses an independent electronic system for tracking syphilis disease data, speak with your manager

- about how to determine whether the person is a chronic reactor. Sometimes a person will report syphilis testing or treatment in another state, but does not yet have a reactor case recorded in Orpheus. In this circumstance, identify, to the best of your ability, the city, state, and approximate year of treatment. Forward this information to the STD Control Program via phone or Orpheus note to request that state staff contact the other state for records of past treatment and testing.
- 2. Report all presumptive and confirmed cases to the Public Health Division HIV/STD/TB (HST) Program by the end of the calendar week of initial physician or laboratory report by completing the case report directly in the Public Health Division's online integrated disease reporting system (Orpheus) by submitting a completed copy of the syphilis case report form available from the HST website, or by submitting an electronic file in mutually acceptable format that includes all information indicated collected by the case entry layout in Orpheus.

2. THE DISEASE AND ITS EPIDEMIOLOGY

2.1 Etiologic Agent

Treponema pallidum, a bacterium of the order Spirochaetales.

2.2 Description of Illness

Syphilis is a complex, systemic, sexually transmitted infection that has a highly variable clinical course. The etiologic agent, *T. pallidum* cannot be grown in culture. Untreated, it progresses through stages: primary, secondary, latent, and late syphilis with clinical manifestations, that are often separated by long periods of latency. Congenital infections can occur in infants after *in utero* or intrapartum inoculation. Central nervous system infection (neurosyphilis) can occur at any stage. Approximately 30–40% of untreated persons will develop complications of late syphilis, sometimes many years after infection.

Primary. Primary syphilis is the first stage after an incubation period of 10–90 days (average 21 days), characterized by an ulcer (chancre, sore, or primary lesion) that is typically concave, with a raised border. Primary syphilis is sometimes referred to by its traditional CDC code, "710." It is typically painless, appears at the site of inoculation, generally the genitalia or anus. Primary lesions can occur at other sites of inoculation such as the lip, breast or mouth and might be located at ordinarily invisible locations such as the cervix, vagina or rectum. Commonly, only one lesion is present, but more than one ulcer might be present. Inguinal lymphadenopathy is common. The primary lesion persists for 1–5 weeks (3 weeks average) then goes away. This is the most infectious stage of syphilis. Treponemal and non-treponemal tests might be negative when a primary syphilis ulcer first appears. (§2.3)

Secondary. After the primary lesion disappears, a latency period of 0–10 weeks (average of 4 weeks) typically ensues, after which the secondary stage appears in about 25% of individuals with untreated infection. Secondary syphilis is sometimes referred to by its traditional CDC code, "720." Common symptoms include a generalized body rash, lymphadenopathy, mucous patches, patchy hair loss (alopecia), and malaise. Rash is famously protean, often appears as faint coppery macules on palms of hands ("palmar") and soles of feed ("plantar"). Secondary symptoms typically persist from 1–6 weeks. One ordinarily finds both treponemal and non-treponemal tests to be reactive during secondary syphilis. (§2.3)

Early latent. During latent syphilis *T. pallidum* organisms persist in the body of the infected person but no symptoms manifest. For epidemiologic purposes, we separate latent syphilis into two categories: *early latent*, which is defined as an infection of one year or less, and *late latent*, which is an infection lasting >1 year. Early latent syphilis comprises the interval between the resolution of secondary symptoms (up to 6.5 months after infection) and 1 year after infection (exposure). In some instances, earliest date of infection (exposure) can be inferred from a documented negative serologic test collected before the current diagnosis, or from onset of documented signs of primary or secondary syphilis. When the earliest date of infection or exposure can be determined with confidence to have occurred within a year of diagnosis a case should be classified as *early latent*. Early latent syphilis is sometimes called by its traditional CDC code, "730."

Late latent. In many other instances, exact date of infection (exposure) cannot be known or constrained with certainty. These cases should be considered to be *late latent*. If the case remains untreated latent syphilis can persist for the remainder of the person's life. Late latent syphilis is sometimes called by its traditional CDC code, "745."

Late syphilis with clinical manifestations other than neurosyphilis. Sometimes called "late syphilis," or "tertiary syphilis," this stage typically becomes evident 15–30 years after untreated primary infection. Late syphilis with clinical manifestations other than neurosyphilis is sometimes referred to by its traditional CDC code, "750." Clinical manifestations most commonly include inflammatory lesions of the cardiovascular system, skin, and bone. Less commonly, late syphilis causes clinical manifestations in other anatomic locations such as the respiratory tract, mouth, eye, viscera, lymph nodes, or skeletal muscle.

Neurosyphilis. Central nervous system *T. pallidum* infection defines neurosyphilis. Neurosyphilis used to be considered a distinct stage of syphilis but syphologists no longer consider neurosyphilis to be a distinct stage of syphilis in the sequential sense; neurosyphilis can occur during any stage of syphilis. Nevertheless neurosyphilis is still sometimes referred to by its now-obsolete traditional CDC code, "760." Laboratory findings include a reactive treponemal serologic test for syphilis and a reactive VDRL test in cerebrospinal fluid (CSF). (§2.3) When signs or symptoms are present in early syphilis, these can include manifestations of meningitis, ocular syphilis (such as posterior uveitis), hearing loss (otosyphilis), and arteritis leading to stroke. Neurosyphilis during early syphilis can resolve spontaneously and might be asymptomatic. Late neurosyphilis can manifest as a progressive dementing illness (general paresis, dementia paralytica), or tabes dorsalis (locomotor ataxia), a disease of the posterior columns of the spinal cord and dorsal roots.

Congenital. Fetal infections occur with high frequency in untreated early syphilis infections of pregnant women and with lower frequency when pregnancy occurs during latent infection or late syphilis. The fetus acquires the infection while *in utero* via maternal circulation or during delivery by exposure to primary or secondary lesions. Congenital syphilis can cause abortion or stillbirth and may cause infant death due to pre-term delivery of low birth weight infants or from generalized systemic disease. If an expectant mother at term were to have visible primary syphilis lesion of the cervix, vulva, or vagina physicians might consider cesarean delivery to reduce risk of intrapartum infection. However in most instances fetal exposure has already occurred and cesarian section is not beneficial for reducing complications of congenital syphilis. The Oregon STD Program and CDC request collection of unique case-report information for cases of congenital syphilis. A special case reporting form can be downloaded from the Health Division website (http://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/ReportingCommunicableDisease/ReportingForms/Pages/index.aspx) or obtained by contacting the STD Program directly (971-673-0153).

2.3 Serologic Tests for Syphilis

Non-Treponemal Tests.

These test for non-specific antibodies in a person's blood after syphilis infection. Typically become reactive (positive) ≥3 weeks after exposure (infection). Can be non-reactive (negative)in primary syphilis. Almost always positive in secondary and subsequent stages if untreated. Non-treponemal tests (most commonly RPR) can be reported qualitatively as "positive" ("reactive") or "negative," ("non-reactive") or quantitatively as a "titer" or "dilution," e.g., "1:4," "1:8", "1:16" ..., or simply "4", "8", "16" ... The higher the dilution (titer) number, the greater the amount of antibody present. Titers can be very high (e.g. ≥1:1024) in early syphilis. On occasion, non-treponemal tests can be falsely negative in patients with very high titers. This is known as the "prozone effect." If early syphilis is strongly suspected, ask the laboratory to check for the prozone effect. Even without treatment, titers fall after early syphilis and can be relatively low (e.g. 1:4, 1:8) in untreated latent syphilis. Titers typically fall after treatment but can remain at low positive levels indefinitely. People with persistently reactive non-treponemal tests are said to be "chronic reactors" or are said to be "sero-fast." Non-treponemal tests are used to monitor response to treatment. A titer decline ≥4 fold (e.g., from 1:32 to 1:8) within 12 months of treatment is generally considered be indicative of appropriate response to treatment. If a non-treponemal test is reported qualitatively as "positive," ("reactive") it is important to arrange with the laboratory for quantitative estimate of dilution titer as the titer value will be necessary for staging, treatment and follow-up. If the specimen is not available another specimen should be collected prior to treatment and quantitative titer specifically requested. Often, non-treponemal tests will become positive ("convert") after traditional treponemal test such as FTA-ABS (below). So, in circumstances where recent syphilis exposure is highly likely, consider collecting a blood specimen for treponemal serology despite negative non-treponemal test.

Rapid Plasma Reagin (RPR)

Most commonly used non-treponemal test. RPR is the initial test in the traditional test algorithm used to screen asymptomatic people for syphilis. False-positive RPRs do occur; all reactive (positive) RPR tests should be confirmed by a treponemal test before making a diagnosis of syphilis in someone without symptoms or exposure history.

Venereal Disease Research Laboratory (VDRL)

Preferred test for non-treponemal testing of cerebrospinal fluid (neurosyphilis). Rarely used for peripheral blood testing.

Treponemal Tests

These test for specific antibodies to the T. pallidum bacterium in a person's blood after syphilis infection. Should be reported qualitatively as reactive (positive) or non-reactive (negative) but can be reported as a numeric value from 1 to 4, with higher numbers representing stronger test response. Values from 2 to 4 should be treated equivalently as reactive (positive) without reference to numeric strength of response. Treponemal tests typically become reactive (positive) ≥3 weeks after exposure (infection). Once reactive (positive) treponemal tests generally remain so for life and are not useful for diagnosing reinfection or inadequate treatment. In the latter instances quantitative titers of non-treponemal tests should be used. On occasion, a laboratory might report the result of a treponemal test as "weakly reactive," or with a quantitative value of "1," or "1+." Such a result should be thought of as indeterminate and the test repeated or another type of treponemal test conducted.

Fluorescent Treponemal Antibody-Absorbed (FTA-ABS)

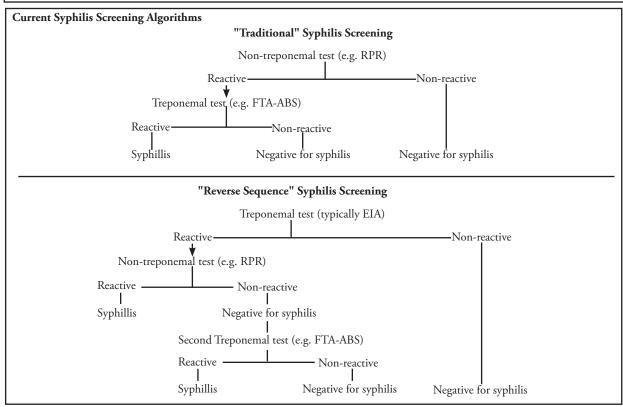
This is the treponemal test available at Oregon State Public Health Lab and is most commonly used treponemal test in Oregon.

Microhemagglutination Test for Antibodies to Treponema pallidum (MHA-TPA)

Treponema pallidum agglutination test (TP-PA)

Treponema pallidum enzyme immunoassay (TP-EIA)

This test has been automated and consequently is often used as the first test in the so-called "reverse algorithm" screening for syphilis. False positives are common and should be confirmed by a non-treponemal test. If the non-treponemal test is non-reactive (negative), another treponemal test (e.g., FTA-ABS) should be conducted before making a diagnosis of syphilis infection.



2.4 Reservoirs

Infected humans only.

2.4 Sources and Modes of Transmission

1. Sexual

Direct contact with infectious exudates from obvious or concealed moist, primary or secondary lesions of skin, and with mucous membranes of infected people during sexual intercourse. From 1997 until this writing, infectious syphilis has disproportionately occurred among men who have sex with men, many of whom have HIV. During this period, cases among women have often been linked epidemiologically to a male sex partner who also has sex with other men. This can be an important subject to explore during case investigation.

Vertical.

Transmitted from mother to fetus *in utero* or during delivery. During the first decade and a half of the 21st century congenital syphilis has been exceedingly rare in Oregon, 4 cases having been observed.

3. Bloodborne.

Transmitted via transfused blood if donor in early stages of disease. (This is a rare event.)

2.5 Incubation Period

Ten to 90 days, (average 21 days). Length of incubation may be related to the amount (number of organisms) to which the person is exposed; the greater the number (amount of inoculum), the shorter the incubation period.

2.6 Period of Communicability

Infections are communicable to sex partners during primary and secondary stages. Direct physical contact with primary lesions is highly infectious. Also, *T. pallidum* can be identified from dry syphilitic rashes and these are thought to be infectious, at least in theory. However, transmission by physical contact with a dry rash is thought to be rare. Other secondary lesions such mucous patches and condyloma lata (wart-like rash of genital and occasionally other intertriginous areas) and are believed to be more infectious than dry rashes. Infected pregnant women can pass the infection to the fetus during pregnancy regardless of stage of infection. Pregnant women with genital lesions can infect a newborn by exposure to lesions during birth.

2.7 Treatment

(If more than a few days have elapsed between most recent quantitative non-treponemal test was collected, it is prudent to collect another at treatment. Sometimes titers rise rapidly in early syphilis. If a post-treatment titer is compared to a titer that is drawn more than a few days before treatment, one might be led to (falsely) conclude that treatment response was less than 4 dilutions.)

Primary, secondary, and latent infections known to be of <1 year duration.

Adults: benzathine penicillin G, 2.4 million units intramuscularly in a single dose. (Note that standard packaging consists of syringes pre-filled with 1.2 million units each of benzathine penicillin. Always read packaging instructions carefully, but if you have syringes pre-filled with 1.2 million units, a complete adult dose typically requires administration of 2 full pre-filled syringes, one in each gluteus (preferably) or quadriceps muscle. At room temperature, benzathine penicillin is quite viscous and must be injected slowly. Patients who receive injectable penicillin should be observed for signs of severe allergy for \geq 20 minutes after injection.)

Infants and children: benzathine penicillin G, 50,000 units/kg intramuscularly, up to the adult dose of 2.4 million units in a single dose.

Penicillin allergy (adults)

Doxycycline 100 mg orally twice daily for 14 days (Doxycycline should not be used to treat syphilis in pregnant women.), OR

Tetracycline 500 mg orally four times daily for 14 days (Tetracycline should not be used to treat syphilis in pregnant women.), OR

Azithromycin, 2 g orally in a single dose (Azithromycin should be used with caution; azithromycin resistance and treatment failures have been documented in the U.S. Azithromycin should not be used to treat syphilis in pregnant women.), OR

Ceftriaxone 1 g intramuscularly or intravenously daily for 10–14 days (Optimum dose and duration have not been defined. Approximately 2% of individuals with skin-test proven allergy to penicillin have allergy to cephalosporins. Ceftriaxone should not be used to treat syphilis in pregnant women.), OR

Skin testing for penicillin allergy and desensitization if expertise to perform these is available.

Late latent infections (>1 year or unknown duration since infection) and late syphilis with clinical manifestations other than neurosyphilis.

Adults: benzathine penicillin G, 7.2 million units total, administered as 3 doses of 2.4 million unit

intramuscularly each at one-week intervals.

Infants and children: 150,000 units/kg total up to the total adult dose of 7.2 million units, administered as 3 doses of 50,000 units/kg up to the adult single dose of 2.4 million units each at on-week intervals.

Penicillin allergy (adults)

Doxycycline 100 mg orally twice daily for 28 days (Doxycycline should not be used to treat syphilis in pregnant women.), OR

Tetracycline 500 mg orally four times daily for 28 days. (Tetracycline should not be used to treat syphilis in pregnant women.),

(Ceftriaxone might be effective for treatment of late latent or unknown latency infections. However, the optimal dose and duration have not been defined. Use of ceftriaxone for treatment of late syphilis should be discussed with a specialist. Ceftriaxone should not be used to treat syphilis in pregnant women.)

Neurosyphilis (Individuals with early syphilis and cerebrospinal fluid abnormalities in the absence of clinical neurological findings can be treated as early syphilis [above].) If clinical evidence of neurologic involvement is observed, such as cognitive dysfunction, motor or sensory deficits, ophthalmic or auditory symptoms, cranial nerve palsies or meningitis, a cerebrospinal fluid analysis should be performed.)

Aqueous crystalline penicillin G 18–24 million units per day, administered as 3–4 million units IV every 4 hours, or continuous infusion, for 10–14 days.

Alternative:

Procaine penicillin G 2.4 million units intramuscularly once daily, PLUS

Probenecid 500 mg orally four times a day, both for 10–14 days.

(Consider administering benzathine penicillin intramuscularly once weekly for 3 weeks after completion of the neurosyphilis regimen to provide a comparable duration of therapy to that recommended for latent syphilis >1 year duration and late syphilis with complications other than neurosyphilis.)

Congenital syphilis.

Aqueous crystalline penicillin G 100,000–150,000 units/kg/day administered as 50,000 units/kg/dose intravenously every 12 hours during first 7 days of life and every 8 hours thereafter for a total of 10 days, OR

Procaine penicillin G 50,000 units/kg/dose IM in a single daily dose for 10 days.

2.7 Assessing for other Sexually Transmitted Infections

All clients diagnosed with syphilis should be offered testing for HIV, gonorrhea, and chlamydia.

3. CASE DEFINITIONS, DIAGNOSIS AND LABORATORY SERVICES

3.1 Confirmed Case

Primary syphilis. A clinically compatible case with one or more ulcers (chancres) in which *T. pallidum* is demonstrated in a clinical specimen by dark field, fluorescent antibody, or equivalent microscopic methods.

Secondary syphilis. A clinically compatible case (i.e., localized or diffuse mucocutaneous lesions, often with generalized lymphadenopathy) in which T. *pallidum* is demonstrated in a clinical specimen by dark field, fluorescent antibody, or equivalent microscopic methods.

Late syphilis with clinical manifestations other than neurosyphilis. Demonstration in specimens from lesions suggestive of late syphilis of *T. pallidum* by fluorescent antibody or special stains in a clinically compatible case (i.e. inflammatory lesions of the cardiovascular system, skin and bone or respiratory tract, mouth, eye, viscera, lymph nodes or skeletal muscle).

Congenital syphilis. Demonstration of *T. pallidum* by dark field microscopy, fluorescent antibody, or other specific stains in specimens from lesions, placenta, umbilical cord, or autopsy material obtained from an infant.

3.2 Presumptive Case

Primary syphilis. A clinically-compatible case with one or more ulcers (chancres) and a reactive treponemal or non-treponemal serologic test for syphilis.

Secondary syphilis. A clinically-compatible case with a reactive, non-treponemal test (RPR or VDRL) titer > 4 dilutions (1:4). (Immunologically deficient clients may exhibit unusual test results such as non-reactive RPR or FTA.)

Early latent syphilis.

No current clinical signs or symptoms of syphilis, with either of the following:

A reactive non-treponemal test, and a reactive treponemal test, without a prior history of syphilis, or

A past history of treatment for syphilis and a current non-treponemal test titer \geq four times the previous non-treponemal test titer. (e.g., current titer of 1:32, previous titer 1:8, $32 = 4 \times 8$)

AND,

Evidence of syphilis acquisition within the past 12 months including any of the following:

Documented seroconversion from non-reactive to reactive treponemal test, or \geq fourfold increase in titer of a non-treponemal test *during* the previous 12 months, or

Signs or symptoms consistent with primary or secondary syphilis during the previous 12 months without having been treated for syphilis, or

Sex partner of someone with confirmed or presumptive primary or secondary or early latent syphilis during the past 12 months without a history of treatment, or

Reactive non-treponemal and treponemal tests from an individual whose only possible sexual exposure occurred within the preceding 12 months.

Late latent syphilis.

No current clinical signs or symptoms of syphilis, with either of the following:

A reactive non-treponemal test, and a reactive treponemal test, without a prior history of syphilis, or

A past history of treatment for syphilis and a current non-treponemal test titer \geq four times (2 dilutions) the previous non-treponemal test titer. (For example, current titer of 1:32, previous titer 1:8, $32 = 4 \times 8$)

AND

Case does *not* have evidence for syphilis acquisition within the past 12 months. (See Early Latent Syphilis.)

Late syphilis with clinical manifestations other than neurosyphilis.

Characteristic abnormalities or lesions of the cardiovascular system, skin, bone or other structures with a reactive treponemal test, in the absence of other known causes of these abnormalities, and without CSF abnormalities and clinical signs or symptoms consistent with neurosyphilis.

3.3 Suspect Case (not reportable to Oregon Health Division)

Primary syphilis. A clinically-compatible case without laboratory or serologic confirmation. In this instance a blood test for syphilis may have been done, but it is possible that there hasn't been time for an antibody response, so the non-treponemal and treponemal tests may be nonreactive. Confidence is strengthened if the case is related epidemiologically to a known early syphilis infection.

Secondary syphilis. A clinically-compatible case without laboratory or serologic confirmation. Because blood tests for syphilis tend to be almost 100% sensitive during the secondary stage, a suspect case diagnosis should be considered only after carefully weighing all the evidence. Confidence is strengthened if the

suspect case is related epidemiologically to a known early syphilis infection.

(Exposed sexual contacts who can be located should be treated "preventively" with the same treatment that would be used for a confirmed or presumptive case of primary or secondary syphilis (§2.7). Case reports needn't be completed for suspect or preventively treated cases though information about sexual contacts to confirmed cases—including dates and doses of preventive treatment should be collected and recorded as described below (§4.3). If laboratory or serologic evidence of *T. pallidum* infection subsequently becomes available for a suspect case, a case report should be completed and the case recorded as confirmed or presumptive as described.)

3.4 Services Available at the Oregon State Public Health Laboratory (OSPHL)

OSPHL performs RPR and FTA-ABS testing of serum. (Typically these are done in batches; current practice is to run the batches on Tuesday.) Contact the laboratory with questions, 503-693-4100.

(Multnomah County Health Department performs dark-field microscopy. Successful visualization of spirochetes such as *T. pallidum* requires vigorous abrasion of the suspected syphilis lesion with immediate application of exudate to a microscope slide and immediate microscopy on site by an experienced dark-field microscopist. If you are seeing a patient with a lesion consistent with primary or secondary syphilis, would like to have dark field examination done, and it is feasible to send the patient to Multnomah County Health Department examination and dark-field microscopy without unnecessarily delaying treatment, contact the Multnomah County Sexually Transmitted Disease Clinic to arrange for the case to be examined. [503-988-3700])

4. ROUTINE CASE INVESTIGATION

4.1 Provider Interview

Contact the health care provider to verify treatment, complete missing, ambiguous, or erroneous elements of the initial case report and inform the provider that you or another public health professional will contact the case-patient directly for interview. A provider interview can be done by telephone, or paper case report forms can be faxed or delivered online for completion by the provider.

4.2 Patient Interview

A confidential interview should be attempted for all presumptive and confirmed cases. Client privacy should be carefully guarded and ensured, and confidentiality of information preserved throughout the interview and case investigation. Telephone and face-to-face approaches are acceptable. Electronic communication such as text and e-mail might be acceptable alternatives if confidentiality, privacy and security can be reasonably assured. Check with a manager or LHD administrator for guidance about permissibility of these alternative electronic communication methods for interviewing syphilis cases. Some patients are reluctant to disclose or not forthcoming about pertinent information about sex partners during the initial interview. In these circumstances, consider second or even third interviews ("re-interviews"). Often patients who are mistrustful, distracted, or simply adapting to their diagnosis will provide more actionable information when they are re-interviewed in a confidential and respectful way. Repeat interviews can be particularly important when women of childbearing age are believed to have been exposed in an effort to prevent congenital syphilis.

In cases where the client is aged <13 years, speak with the parent or legal guardian first. Exercise professional judgment about the need to interview the child separately or in the presence of the parent or guardian.

4.3 Managing Sexual Partners

One should attempt to identify, interview, examine, and test all sex partners of the case within the appropriate interview period for the stage of syphilis (Table, *infra*). Sex partners exposed within 3 weeks of interview should be treated "preventively," since serologic tests will not reliably be positive if the partner is infected. Other sex partners should be treated "preventively" if the partner is likely to be difficult to find or is expected to have difficulty returning for results of testing and treatment if indicated. If a client has not had sex within the interview period, the most recent sex partner should be examined and tested if possible, and treated based on test results.

Long term sex partners of cases with late latent or late syphilis should be offered testing.

Interview periods by syphilis stage*

Stage	Interview Period
Primary	90 days before date of onset of primary lesion through date of treatment
Secondary	6.5 months before date of onset of secondary symptoms through date of treatment
Early latent	1 year before start of treatment

^{*}Attempts should be made to interview, examine, test and treat "preventively" partners exposed during the appropriate interview period.

During the confidential interview, ask cases with early syphilis for the names and contact information of everyone with whom the case has had sex within the appropriate interview period (Table). If the case denies any sex partners during the interview period, record the name and contact information for the most recent sex partner regardless of the interval since most recent sexual contact. Remember to collect from the case if known: the partner's nicknames, address, telephone numbers including cell phones, e-mail addresses, social network sites where patient meets partners along with usernames, race, sex, age, primary language spoken and earliest and most recent dates of sexual contact (regardless of condom use) for each sexual partner recorded.

Visual case analysis (VCA) is a tool that can sometimes be quite helpful in constraining the most likely period during which the case was inoculated and the periods during which the case was most likely to have been infectious. When used for each case within a related cluster of cases, it can help identify the most likely source of infection of each case. In circumstances where a case's inoculation occurred during a peiod which no other member of teh cluster was highly infectious, VCA can highlight that a yet unrecognized case or cases are still to be identifed. Instructions and forms for VCA are available on the communicable disease forms web page under "Syphlis" (http://public.health.oregon.gov/DiseasesConditions/CommunicableDisease/ReportingCommunicableDisease/ReportingForms/). Contact the Oregon STD Program if you'd like assistance with visual case analysis.

Using available information, named sexual contacts should be contacted within 2 working days of the initial case interview by telephone, field (in-person) visit, or other method, and referred to their LHD or another health care provider for evaluation, testing, and treatment. Generally, LHD staff should try to contact the sex partner 3 times before determining that the partner cannot be located. Attempts should be made to contact the partner on alternate days and times of day. When possible, alternate contact method should also be tried. For example, if telephone calls have not been successful, an field (in-person) visit should be considered. If the client prefers to refer the partner, health department staff should determine how they will verify that the partner has been examined or treated. If the contact's treatment cannot be verified within a reasonable time frame (2–5 days), one should attempt to notify and refer the partner for examination and treatment. If locating information is not available for the sex partner, health department staff should call or contact the client for additional information.

When a partner is reached, all outstanding personal information indicated by the "Contacts" tab of the Orpheus case entry form or on the contacts section of the paper form not previously provided by the health care provider should be collected and any that the health care provider reported should be confirmed. The date and outcome of each attempt to interview each partner should be recorded along with the dates and results of any laboratory tests conducted and the dates and details of any presumptive treatment or treatment of laboratory-confirmed infection. When the attempt to notify and treat the partner have been completed the date and outcome (disposition) of the efforts (e.g., "infected, brought to treatment," "unable to locate," "refused preventive treatment," etc.) should be recorded and any additional useful information collected retained.

In some circumstances, such as a local outbreak or widespread cluster of cases, it might become useful to identify and test or treat friends of cases and members of the same social or sexual network. If you collect information about people who are friends or members of the same sexual or social network for purposes of testing or treatment, these too can be listed with other contacts.

The "Lot System" is a traditional sexually transmitted disease investigation tool. When records were kept on paper, a "lot" represented a single folder containing all records related to a cluster of related cases with a goal of making all information related to an investigation available to all responsible workers for use in

interview or re-interview, treatment or followup of cases, partners or associates. Orpheus provides a mechanism to create lots and to assign patients to lots (§4.4). Lots can be assigned for any "logical" reason, for example: 1) patients are related, i.e., they name one another as sex partners or are linked through clustering or 2) cases share something in common, such as working for the same company or living in the same apartment building.

4.4 Documentation

If using Orpheus:

Basic, Risk and Clinical and Follow-up tabs.

Enter information collected from the client into the appropriate areas of the Orpheus case report interface — Basic, Risk and Clinical and Follow-up tabs.

If the client provides personal (non-clinical) information such as demographic or sexual exposure history that contradicts information collected from health care provider/s, overwrite the provider response with the client response and make a note of the change in the notes section of the Orpheus case report.

Contacts tab:

Record information about contacts directly into the "Contacts" and related sub-tabs of the case entry interface. Use the "+ Contact" button on the "Contacts" tab of the Orpheus case report to add each new contact. Alternatively, you can record the contact information on the paper case report form for later transfer into Orpheus, or into your local database. This list should include all named contacts within the appropriate interview period (Table, p. 9) including those from whom the client might have acquired infection and others whom the client might have exposed. If you have decided to collect information about associates and sex partners named by others, record their information here too. Record the type of contact (Table *infra*) in the field labeled 'Referral basis.' Record the date and final outcome ('disposition;' Table *infra*) of your efforts in the "Contacts" tab of the case entry form. Be sure that the name of the partner about whom you wish to enter information has been highlighted in the right side of the "Contacts" tab before entering data in any of the sub-tabs.

Contact Type Codes

Disposition code	Use
Partners	
P-1	Sex partner
P-2	Needle partner
P-3	Sex and needle partner
"Suspects"	
S-1	Named by this case patient; has symptoms suggestive of disease
S-2	Named by this case patient; is a sex partner of <i>another</i> person who is known to be infected
S-3	Named by this case patient; needs exam; not S-2 or S-3
"Associates"	
A-1	Named by someone who is not infected; has symptoms suggestive of disease
A-2	Named by someone who is not infected; is a sex partner of someone who is infected
A-3	Named by someone who is not infected; could benefit from exam; not A-2 or A3

Disposition Codes for Sex Partners and Associates

Disposition code	Use
A - Preventive Therapy	Sex partner or associate of case, treated, no treponemal or non-treponemal test available
B - Refused Preventive Therapy	Sex partner or associate of case, refused treatment, no treponemal or non-treponemal test available
C - Infected, Brought to Treatment	Sex partner or associate meets probable or confirmed case definition (any stage), treated.
D - Infected, Not Treated	Sex partner or associate meets probable or confirmed case definition (any stage), not treated (e.g. refused, lost to follow-up).
E - Previously Treated for this Infection	Sex partner or associate meets probable or confirmed case definition (any stage), treated by another healthcare provider prior to interview.
F - Not Infected	Serologic tests results available for sex partner or associate and not consistent with probable or confirmed case definition (any stage).
G - Insufficient Information to Begin Investigation	Named suspect or associate without sufficient available information (such as telephone, address, or email) to attempt to contact.
H - Unable to locate	Attempted but unable to locate sex partner or associate.
J - Located, Refused Examination	Successfully located sex partner or associate, but refused testing or treatment.
K - Out of Jurisdiction	Sex partner or associate resides in another state, country or county.
L - Other	Outcome of attempt to locate other than listed elsewhere in table.
M - Reverse Contact Link	Sex partner or associate also meets probable or confirmed case definition (any stage) and is likely source to current case. In this circumstance laboratory and treatment outcome is stored with the sex partner or associate's case information. This code is used to avoid "double counting" partners who are "reciprocally listed" on cases for which they were the source.

Demographic sub-tab:

Enter partner information in the "Demographics" sub-tab of the "Contacts" tab.

Exposure:

Record the date of the first sexual encounter between this partner and the client and the date of the most recent encounter in the "Exposure" sub-tab of the "Contacts" tab. Record the outcome of efforts to contact the partner in the exposure sub-tab.

Notes sub-tab:

Record the date and outcome of each attempt to interview each partner and record this information in the "Notes" sub-tab of the "Contacts" tab of the Orpheus case entry interface. Retain any useful information in the "Notes" sub-tab of the "Contacts" tab of the Orpheus case entry form.

Labs & Treatment sub-tab:

Record the dates and results of any laboratory tests conducted and the dates and details of any presumptive treatment or treatment of laboratory-confirmed infection in the "Labs & Treatment" sub-tab.

Epilinks sub-tab (lots):

If you wish to assign a lot number (§4.3) to each case within a logical group or cluster to facilitate investigation, contact the STD Control Program (971-673-0153) to request that a lot be assigned. To assign a case to a lot, go to the "Epilinks" sub-tab and select the assigned lot number from the drop down list.

5. CONTROLLING FURTHER SPREAD

5.1 Education

During the interview, clients with early syphilis (primary, secondary or early latent) should be counseled to complete all recommended treatment, avoid sex until treatment has been completed and any sores or rashes have resolved, avoid sex with untreated sex partners until they too have been treated and their sores or rashes resolved, and to use condoms to reduce the risk of acquiring sexually transmitted infections in the future. Clearly other behaviors associated with sexually transmitted disease such as multiple concurrent, or anonymous sex partners should be discouraged, but to be effective, counseling should be personalized to the client by taking a "client-centered" approach. In general, sexually transmitted disease interviews involve a single encounter with the client, so the focus of the interview, by necessity, must be fairly narrow. Give attention to those behaviors that the client seems willing or able to change.

5.2 Case Follow-up

Every individual with a reported case of syphilis should be advised to seek medical attention for persistent symptoms and to undergo clinical evaluation and serologic testing (non-treponemal test, typically RPR) at 6 months and 12 months after treatment. If the case was treated with an alternative to penicillin because of allergy or other reason, serologic follow-up should begin at 3 months after treatment. In circumstances where adherence to follow-up recommendations is in doubt or access to follow-up might be limited, some settings elect to conduct earlier follow-up testing at 2 and 3 months. (Recommended follow-up intervals for serologic testing for pregnant women and individuals who also have HIV infection are different [§6.1 & §6.2].)

Treatment failure should be assumed and re-treatment initiated if a case exhibits persistent or recurrent signs or symptoms or sustains a fourfold (2 dilutions) increase in non-treponemal test titer compared with titer at the time of treatment. Such cases should also be re-evaluated for HIV infection and undergo a cerebrospinal fluid evaluation.

Failure of non-treponemal test titers to decline fourfold (2 dilutions) within 6–12 months after therapy might be indicative of treatment failure, though some people with successful treatment will not manifest the 2 dilution decline in titer. If titers do not decline, patients should receive additional clinical and sero-logic follow-up, and consideration given to cerebrospinal fluid examination and re-treatment.

6. MANAGING SPECIAL SITUATIONS

6.1 Case Also Has HIV/AIDS

All persons who have syphilis should be tested for HIV infection and other sexually transmitted infections including gonorrhea and chlamydia. Consider retesting for HIV after 3 months if the first HIV test is negative.

Though uncommon, unusual serologic responses have been observed among HIV-infected persons who have syphilis. Most commonly, serologic titers have been higher than expected, but false negative serologic tests and delayed appearance of antibodies have been reported. Serologic titers should be interpreted in the usual manner for diagnosis and treatment of *T. pallidum* infection.

Unless neurologic symptoms are present, cerebrospinal fluid examination is not necessary in individuals with HIV and syphilis.

HIV-infected individuals with syphilis should be treated with the same regimens recommended for HIV-negative individuals.

Compared with HIV-negative individuals with syphilis, HIV-infected individuals with syphilis might be at increased risk for neurologic complications and might have higher rates of serologic treatment failure.

Follow-up non-treponemal serologic tests should be collected from HIV-infected individuals after treatment for syphilis at 3, 6, 9, 12 and 24 months after syphilis treatment.

Treatment failure in HIV-infected individuals with syphilis should be managed in the same manner as treatment failure in HIV-negative individuals.

6.2 Case is Pregnant

Parenteral penicillin G is the only therapy with documented efficacy for syphilis at any stage during pregnancy. Pregnant women with syphilis who report penicillin allergy should be desensitized and treated with

Syphilis

penicillin.

Pregnant women with reactive non-treponemal (RPR) serologic tests should have confirmatory testing with a treponemal test. Where prenatal care is not optimal or syphilis prevalence is high, treatment should be provided at the time a non-treponemal test is reactive while awaiting results of treponemal tests.

Where prevalence is high or a pregnant woman is believed to be at high risk for syphilis, serologic testing should be performed twice during the third trimester at 28–32 weeks and again at delivery.

Women with reactive treponemal tests (seropositive) should be considered to be infected unless an adequate treatment history is documented clearly in the medical records with decline in non-treponemal serologic titers after treatment.

Jarish-Herxheimer reaction (§6.3) with treatment might precipitate premature labor or fetal distress; women should receive obstetric attention if they note any fever, contractions, or decrease in fetal movements.

Follow-up treponemal serologic tests should be collected at 28–32 weeks gestation and again at delivery, and at 6 and 12 months after treatment. If a woman is believed to be at high risk for reinfection, titers can be checked monthly during pregnancy.

6.3 Jarisch-Herxheimer Reaction

The Jarisch-Herxheimer reaction is an acute febrile reaction frequently accompanied by headache, myalgia, fever, and other symptoms that usually occur within the first 24 hours after the initiation of any therapy for syphilis. Patients should be informed about this possible adverse reaction. The Jarisch-Herxheimer reaction occurs most frequently among patients who have early syphilis, presumably because bacterial burdens are higher during these stages. Antipyretics such as acetaminophen or non-steroidal anti-inflammatories like ibuprofen or aspirin can be used to manage symptoms, but they have not been proven to prevent this reaction. The Jarisch-Herxheimer reaction might induce early labor or cause fetal distress in pregnant women, but this should not prevent or delay therapy.

6.4 Outbreak Situations

If a higher than expected number of early syphilis cases occur and are clustered in time and place, consider preventive treatment of friends and associates of cases who are not named sex partners. Contact the Oregon STD Control Program to discuss expanded use of preventive treatment under such circumstances.

Consider circulating advisories to local physicians and other clinicians to inform them of local increases in incidence of syphilis and advise them to heighten their consideration of syphilis in a patient with consistent complaints or history and lower their threshold for screening asymptomatic patients for syphilis.

In communities and populations where syphilis prevalence is high, serologic testing of pregnant women should be carred out at the initial prenatal visit, at 28–32 weeks gestation, and again at delivery. Serologic titers can be checked monthly in women at high risk for reinfection after treatment or in geographic areas in which prevalence of syphilis is high.

If prevalence of syphilis in a specific population, such as men who have sex with men or persons with HIV infection, annual or more frequent screening with non-treponemal test such as RPR is appropriate.

7. APPLICABLE RULES

6.1 Reporting

OAR 333-018-0000 through 333-018-0020

6.2 Investigation

OAR 333-019-0000 and 333-019-0002

8. OTHER RESOURCES

Centers for Disease Control and Prevention. 2010 STD Treatment Guidelines. 2012 (Update). Available at www.cdc.gov/STD/treatment/2010

Centers for Disease Control and Prevention. The National Electronic Telecommunications System for Surveillance (NETSS) CDC Implementation Plan for STD Surveillance Data. January 2014. Available at www.cdc.gov/std/Program/STD-NETSSIMPLN-V4_2014Jan.pdf.

Centers for Disease Control and Prevention. STD Surveillance Case Definitions. Available at www.cdc.

Syphilis

gov/std/stats10/app-casedef.htm

9. UPDATE LOG

April 2014. Created. (Schafer)

June 2014. Revised after comments from CLHO. Fixed typos and errors. Added screening alogorithm graphic. (Schafer)

HIV Infection and AIDS

1. DISEASE REPORTING

A. Purpose of Reporting and Surveillance

- 1. To identify new cases of HIV infection and AIDS.
- 2. To accurately monitor the HIV epidemic in Oregon.
- 3. To describe affected persons.
- 4. To plan and evaluate treatment and prevention programs.
- 5. To identify affected persons in need of services and direct them to available services.
- 6. To advise affected persons of means of preventing transmission of HIV to others.
- 7. To identify localized clusters of new infection and prevent further transmission of disease.
- 8. To insure that persons who have been significantly exposed to a case (e.g., sexual contacts, others exposed to blood or body fluids, injection drug use partners) and may be unaware of their exposure are counseled about measures to prevent infection.

B. Laboratory and Physician Reporting Requirements

- 1. Physicians and other health care providers must report a case or suspected case within one working day to the Local Public Health Authority (LPHA) (OAR 333-018-0015). Upon agreement between the Local Public Health Authority and the Oregon State Public Health Division, HIV/STD/TB Section (HST) (OAR 333-018-0005), reports may be made directly to HST (OAR 333-018-0005).
- 2. Licensed laboratories must report to the LPHA within one working day results of all tests indicative of and specific for HIV infection (e.g., detectable levels of HIV ribonucleic acid [RNA], positive tests for p24 antigen, positive enzyme linked antibody (EIA) tests for HIV when confirmed by Western Blot, CD4+ T-lymphocyte counts < 200 cells per microliter or 14% of T-lymphocytes) (OAR 333-018-0015). Upon agreement between the LPHA and the Oregon State Public Health Division (HST) (OAR 333-018-0005), reports may be made directly to HST (OAR 333-018-0005). In addition, licensed laboratories must report results of all CD4 + T-lymphocyte counts and viral RNA tests ("viral loads") regardless of result within seven days. Laboratory reports may be made directly to the Oregon State Public Health HIV/STD/TB Program (OAR 333-018-0015).</p>

C. Local Public Health Authority Reporting and Follow-Up Responsibilities

1. LPHA must report all confirmed cases of HIV infection and AIDS to HST no later than the end of the business week of the initial report by the laboratory, physician or other health care provider. (OAR 333-018-0020).

2. THE DISEASE AND ITS EPIDEMIOLOGY

A. Etiologic Agent:

Human immunodeficiency virus-1 (HIV-1), a retrovirus, is the cause of almost all HIV-related disease in the U.S., and is found throughout the world. HIV-2 is a closely related virus, causing similar illness. To date, most HIV-2 infections have been documented in West African natives or their contacts; only a handful have been reported in the U.S.

B. Description of Illness

Untreated illness due to HIV infection is biphasic. The initial phase, which may go unnoticed, occurs shortly after infection. This acute syndrome resolves spontaneously, and the infection becomes latent for

several years. Eventually, if untreated, a progressive immune dysfunction develops, associated with depletion of CD4+T-lymphocytes, which predisposes the affected individual to opportunistic infections, tumors, and other conditions.

1. Acute Infection

Shortly after exposure, many infected persons experience a flu-like illness that may resemble mononucleosis. Onset is typically abrupt. Common symptoms of acute infection include fever or sweats, myalgias or arthralgias, malaise and lethargy, lymphadenopathy, sore throat, anorexia, nausea and vomiting, headaches, photophobia, rash, and diarrhea. Symptoms usually resolve over two to three weeks.

2. Subsequent Illness

Most infected persons remain asymptomatic for years after resolution of acute symptoms. During this latent period infection can only be determined by antibody, viral load, or other laboratory testing. If untreated, most HIV-infected individuals eventually manifest myriad signs and symptoms that reflect progressive immune deficiency and herald the onset the of the Acquired Immune Deficiency Syndrome (AIDS) such as persistent generalized lymphadenopathy, neurological disorders, opportunistic infections (OIs), and malignancies. However treatment with antiretroviral medications (ART) can delay or reverse the progression of immune deficiency. Prior to the availability of effective (ART), the case fatality rate for AIDS approached 100%, and most patients who developed clinical AIDS died within 2 years. Many of the more common manifestations of advanced immunosuppression associated with HIV-infection are listed in the AIDS case definition (§3A).

C. Reservoir

Infected humans only.

D. Modes of Transmission

HIV transmission occurs when blood, blood products, semen, vaginal fluids or breast milk from an infected person enters the bloodstream of another person via injection or across breaks or small abrasions of the skin or mucous membranes (e.g., the eye, mouth, vagina or rectum). Virtually all transmission occurs through sexual (sex with an infected person), parenteral (injection with contaminated equipment or injection of contaminated blood or blood products), or vertical (passage of HIV from a woman to her child during pregnancy or breast feeding) route. While HIV may also be found in cerebrospinal fluid, tears, amniotic fluid, urine and bronchoalveolar fluid of infected persons, transmission via exposure to these fluids has not been documented. HIV is not transmitted by casual contact.

E. Incubation period

When present, symptoms of acute HIV infection (B.1.) occur 6 days-6 weeks (rarely, up to 6 months) after infection. HIV antibodies usually develop within a few weeks of exposure—rarely, as much as 6 months later. The interval between infection and antibody development is referred to as the "window period." About 50% of untreated, HIV-infected persons develop AIDS within 10 years of infection; AIDS is rare within 3 years of initial infection.

F. Period of Communicability

HIV-infected persons are infectious for life, although the relative infectivity may vary considerably over time.

G. Treatment

Specific treatment of HIV infection and AIDS is complex and beyond the scope of these guidelines. (Treatment guidelines can be found at http://aidsinfo.nih.gov/guidelines/.) Decisions about when to start ART and OI prophylaxis depend on clinical status and laboratory markers (such as CD4+ T-lymphocyte [CD4] counts). Health care providers can obtain treatment advice from the OHSU Consult

Service (in Portland, 503-494-4567; elsewhere, 800-245-6478), from the Research and Education Group (in Portland, 503 229 8428; elsewhere, 800 875 8428)

Be aware that effective treatment reduces or suppresses viral replication and greatly reduces the risk of transmission. All patients with HIV should be referred for treatment. ART in pregnancy and during labor reduces the risk of vertical transmission of HIV at birth from mother to infant. Elective cesarean delivery may further reduce vertical transmission in cases where plasma levels of HIV RNA are not sufficiently suppressed (<1000 copies ml) prior to the onset of labor. Breastfeeding by HIV-infected women is not recommended in the U.S.

Additional medications can prevent opportunistic infections (OIs) such as disseminated *Mycobacterium avium* complex and *Pneumocystis* pneumonia in the presence of advanced immune deficiency. Antiretroviral drugs in current use include nucleoside and non-nucleoside reverse transcriptase inhibitors, protease inhibitors, integrase inhibitors, CCR5 binding inhibitors and fusion inhibitors.

3. CASE DEFINITIONS, DIAGNOSIS, AND LABORATORY SERVICES

In Oregon, newly diagnosed cases of HIV infection, regardless of severity must be reported to local or state public health authorities (ORS 433.004 and OAR 333-018-0000, 333-018-0010, 333-018-0005, 333-018-0015, 333-018-0030, 333-019-031)

A. Confirmed Case

1. Persons aged ≥18 months

A multi-test algorithm consisting of a positive result on an initial serologic test, which may be an HIV antibody test or a combination HIV antigen/antibody test followed by a positive result on an HIV test different from the initial test, as recommended by the Clinical and Laboratory Standards Institute (CLSI) in the Criteria for Laboratory Testing and Diagnosis of Human Immunodeficiency Virus Infection: Approved Guideline [CLSI document M53-A, ISBN 1-56238-758-8], published in June 2011. The initial HIV serologic test and the other or "supplemental" HIV antibody test that is used to verify the result of the initial test may be of any type approved by the federal Food and Drug Administration for screening or diagnosis of HIV infection, but they must not be identical (FDA website:

http://www.fda.gov/BiologicsBloodVaccines/BloodBloodProducts/ApprovedProducts/Licen sedProductsBLAs/BloodDonorScreening/InfectiousDisease/UCM080466). The type of HIV antibody test that verifies the initial test may be one formerly used only as an initial or preliminary test (e.g., as a conventional enzyme immunoassay [EIA], rapid immunoassay (IA), chemiluminescent assay, HIV-1/2 type-differentiating immunoassay), or it may be one traditionally used as a supplemental test for confirmation (e.g., Western blot [WB], immunofluorescence assay [IFA]). For the purpose of HIV infection surveillance, the CLSI algorithms that conclude with a "presumptive positive" are to be considered equivalent to those that conclude with a definitive positive.

OR,

Positive conclusion of a multi-test HIV antibody algorithm from which only the final result was reported (including a single positive test result from a "supplemental" test (e.g., HIV Western blot, immunofluorescence assay)

OR,

Positive result or report of a detectable quantity (i.e., within the established limits of the laboratory test) from any of the following HIV virologic (i.e., non-antibody) tests:

- Qualitative HIV nucleic acid (DNA or RNA) test (NAT) (e.g., polymerase chain reaction [PCR])
- Quantitative HIV NAT (viral load assay)
- HIV p24 antigen test
- HIV isolation (viral culture)

2. Persons aged <18 months

Positive results on two separate specimens (not including cord blood) from one or more of the following HIV virologic (non-antibody) tests:

- HIV nucleic acid (DNA or RNA) detection
- HIV p24 antigen test, including neutralization assay, for a child aged >1 month
- HIV isolation (viral culture)
- HIV genotype nucleotide sequence

B. Suspect Case

1. Persons aged ≥18 months

Unconfirmed positive antibody or antigen test such as rapid or laboratory-based test without evidence of confirmation or a positive combination antigen antibody test with a negative second antibody test of a different brand or type (such as a Multispot® or Western Blot test)

OR.

A note written by a physician or other qualified medical-care provider that does not meet the laboratory criteria described above but states that the patient has HIV infection.

OR,

Evidence of testing by licensed health care provider for any of the following: HIV nucleic acid (DNA or RNA) detection (a.k.a. "viral load"); HIV p24 antigen test; HIV isolation (viral culture); CD4+T-lymphocyte count or percentage of total lymphocytes; antiretroviral resistance testing.

2. Persons aged <18 months

Positive results on only one specimen (not including cord blood) from any of following HIV virologic tests

- HIV nucleic acid (DNA or RNA) detection
- HIV p24 antigen test, including neutralization assay, for a child aged >1 month
- HIV isolation (viral culture)
- HIV genotype nucleotide sequence

AND,

No subsequent negative results on HIV virologic or HIV antibody tests

OR,

A note written by a physician or other qualified medical-care provider that does not meet the laboratory criteria described above but states that the patient has HIV infection.

C. Staging

Staging categories are intended for public health surveillance and prevention of transmission and not as a guide for clinical diagnosis, patient management, or qualification for benefits. To distinguish the stages of HIV disease defined in this document for surveillance from stages defined for clinical management or other purposes, they should be called "Surveillance Stages." In Orpheus, state (HST) staff will assign each new HIV infection to one of five stages (stage 0, stage 1, stage 2, stage 3, or stage unknown) at the time of diagnosis. Stages 1, 2, and 3 are based primarily on the CD4+ T-lymphocyte count. Although the stage at diagnosis does not change, if >180 days have elapsed after diagnosis in Stage 0, the stage at the later date is classified as 1, 2, 3, or Unknown, depending on CD4+ T-lymphocyte test results on that later date (or within 3 months of it), as described below. Children (aged <13 years) can be classified as Stage 0 if they are known not to have acquired infection through vertical transmission (perinatally from the mother). Children with laboratory evidence of HIV infection and evidence of a qualifying opportunistic illness can be classified as Stage 3 as defined below. CD4 counts should not be used to stage cases in children because no consensus exists about the appropriate levels of CD4 counts for classification. Therefore children who cannot be classified as Stage 0 or Stage 3 will be classified as Stage "undefined."

The stages are defined as follows:

1. Stage 0

Stage 0 is intended to identify people with acute or recent HIV infection. It is defined either by the relationship between positive and prior negative HIV test dates or by a testing algorithm that detects early HIV infection prospectively. It is independent of CD4+ T-lymphocyte test results. A "test date" means the date on which the specimen for the test was obtained, if known, not necessarily the date on which the test was conducted. The stage is 0 if the following criteria are met:

• The date of a negative or indeterminate HIV test was 1 to 180 days before the date of the first confirmed positive HIV test.

OR,

• The date of a negative or indeterminate HIV antibody test was 0 to 30 days after the date of the first confirmed positive HIV test.

AND,

• The negative or indeterminate antibody test was less sensitive than the first confirmed positive HIV test (based on the test sensitivity ranking listed below).

Exceptions: A confirmed case of HIV infection is not Stage 0 if any of the following are true:

- The negative or indeterminate HIV test used as the criterion for the earliness of infection was preceded by >60 days by evidence of an earlier onset of HIV infection: an HIV infection diagnosis based on a clinical ("physician-documented") diagnosis, a CD4 T-lymphocyte count <200 cells/ μ L in an adult/adolescent, or a Stage-3-defining opportunistic illness as stated in the 2008 case definition [1])
- If the criteria for Stage 0 are not met at diagnosis, the stage is classified as 1, 2, 3, or Unknown, depending on the CD4+ T-lymphocyte test results at diagnosis (or within 3 months of diagnosis), as described below.

2. Stage 1

• Criteria for Stage 0 not met

AND,

CD4 count of >500 cells/μL

• If CD4 count is unknown, a CD4+ T-lymphocyte percentage of total lymphocytes of >29%.*

3. Stage 2

Criteria for Stage 0 not met

OR,

• CD4 count of 200--499 cells/µL or

OR,

• If CD4 count is unknown, a CD4 percentage of 14%--26.1

4. Stage 3

Criteria for Stage 0 not met

AND,

- At least one of the following:
 - CD4 count of <200 cells/µL or

OR,

If CD4 count is unknown, a CD4 percentage of <14%

OR,

- One or more of the following at the time of staging. (Whatever method was used to make the diagnosis of any of the opportunistic illnesses will be accepted as sufficient.
 - → Candidiasis of esophagus, bronchi, trachea, or lungs;
 - + Cervical cancer, invasive in persons aged ≥13 years;
 - ★ Coccidiodomycosis, disseminated or extrapulmonary;
 - ★ Cryptococcosis, extrapulmonary;
 - **→** Cryptosporidiosis, chronic intestinal >1 month duration;
 - → Cytomegalovirus disease (other than liver, spleen, or nodes) in persons aged >1 month;
 - ★ Encephalopathy, HIV-related;
 - → Herpes simplex ulcer(s) > 1 month duration, bronchitis, pneumonitis, or esophagitis in persons aged >1 month;
 - **→** Histoplasmosis, disseminated or extrapulmonary;
 - **★** Isosporiasis, chronic intestinal >1 month duration;
 - ★ Kaposi's sarcoma;
 - → Lymphoma, Burkett's (or equivalent term);
 - **→** Lymphoma, immunoblastic (or equivalent term);
 - **→** Lymphoma, primary, of brain;
 - → *Mycobacterium avium* complex or *M. kansasii*, disseminated or extrapulmonary;
 - *★ Mycobacterium tuberculosis*, pulmonary or extrapulmonary;
 - ★ Mycobacterium, other species or unidentified species, disseminated or extrapulmonary;
 - → Pneumocystis pneumonia;
 - Pneumonia, recurrent;

^{*} The change in the CD4 percentage threshold from 29% (as in the current case definition) to 26% (as in the revision proposed above) should be contingent on data being published that support it.

- **→** Progressive multifocal leukoencephalopathy;
- **→** Salmonella septicemia, recurrent;
- **→** Toxoplasmosis of brain in persons aged >1 month;
- → Wasting syndrome due to HIV;
- ◆ (Multiple or recurrent serious bacterial infections.) Any combination of at least two
 culture-confirmed infections within a 2-year period of the following types in
 persons aged ≤1 month: septicemia, pneumonia, meningitis, bone or joint infection,
 or abscess of an internal organ or body cavity (excluding otitis media, superficial
 skin or mucosal abscesses, and indwelling catheter-related infections.)

5. Stage Unknown

Criteria for Stage 0 not met

AND,

- No information available on CD4+ T-lymphocyte count or percentage AND.
- No current evidence of opportunistic illness among those listed above (§3BC4).

C. Services Available at the Oregon State Public Health Laboratories (OSPHL)

OSPHL tests serum and oral specimens for HIV antibodies by an assay that detects both P24 viral antigen and HIV antibody. This is known as a "4th generation" HIV screening test. Positive samples are tested by a second test, either a Multispot® (another type of antibody test that distinguishes HIV 1 from HIV 2) or a Western Blot test. For HIV testing, 5-7 ml of blood in a 13x100 Vacutainer® tube is required. Contact the virology section at OSPHL (503-693-4100) or the state HIV Program (971-673-0181) with questions about HIV testing. HIV testing at OSPHL is available to LPHA clients and to others by special arrangement with OSPHL and the HIV Prevention Program.† OSPHL does not offer rapid antibody testing, HIV RNA detection (a.k.a. "viral load"), HIV isolation (viral culture), or testing for resistance to antiretroviral drugs.

D. Other Laboratory Methods (Not Available at OSPHL)

Rapid testing can be obtained from some LPHA's and private health care providers. Other HIV-related tests can be obtained from private providers or clinical labs.

4. ROUTINE CASE INVESTIGATION

A. Case Investigation

1. Primary Investigation by Local Public Health Authority

New suspect, and confirmed HIV and AIDS cases may be identified by the LPHA through a direct report from a physician or from a laboratory report of a confirmed positive HIV test (serologic or antigen) (§3A) or positive HIV viral load in an individual whose case has not previously been reported. Cases may also be reported to the LPHA by HST as a result of direct

[†] Until February 2012, a person could not be tested for HIV in Oregon unless he or she provided informed consent in a strict medicolegal sense. With the passage of SB 1507 in February 2012, a person upon whom HIV testing is being conducted must be notified of the intent to test for HIV and given an opportunity to decline testing. Notification may be conducted verbally or in writing and may be contained in a general medical consent for treatment.

reporting by laboratories or physicians or as a result of required laboratory reporting directly to HST of all viral loads and CD4+ T-lymphocyte tests and percents (See §1B2).

a. Confirmed Case (See §3A)

- i. Verify that the case has not been previously reported. If the case has previously been reported no additional investigation is required. If you have reason to suspect that the case is not engaged in regular medical care with an HIV specialist (e.g., the reporting provider is not an HIV specialist) attempt to contact the case and/or the health care provider to offer referral to an HIV care specialist. A list of case management specialists who can assist with referrals to care in every county can be found at the following website:
 - http://public.health.oregon.gov/DiseasesConditions/HIVSTDViralHepatitis/HIVCare Treatment/Pages/cmcontacts.aspx
- **Completing the Case Report** (*If case not previously reported.*) Contact the facility/s or health care provider/s where the diagnosis was made and any medical treatment rendered. Paper case report forms can be faxed securely and completed by the provider or completed by the local health department via an interview with the provider or someone from his or her staff. (See Appendix 1 for a printable case report form and instructions.) A supplemental case report form should be completed for each new facility or provider from which data are obtained. Transfer the information from the completed paper report form into Orpheus. If you are completing the case report via telephone, you can enter the information directly into Orpheus without completing a paper case report form. After the case report information has been entered into Orpheus, the paper form can be destroyed. If it is necessary to contact multiple facilities where treatment was rendered, make a notation of this fact in the area reserved for notes in the Orpheus case report. Supplemental case reports collected from additional providers or facilities or from cases themselves need only record clinical, social or demographic information not collected on the initial report and any information that contradicts that collected on an earlier report. It is not uncommon for one local health authority to receive a laboratory report for someone who is ultimately determined to live in another county. This often happens when a clinical laboratory doesn't know the county of residence of the patient and supplies the county where the provider or laboratory is located instead. If you happen to make contact with a medical provider or facility, only to learn that the case doesn't reside in your county, please make an effort to collect the information necessary to complete the case report on behalf of your colleagues. This saves time and aggravation for everyone involved. After completing the report, transfer the case in Orpheus and make a courtesy call to colleagues in the county of residence of the case to advise them of the new case.

iii. Interviewing the Patient

1. Advise the physician or other regular health care provider that someone from public health will likely contact the patient (or parent or guardian if the patient is aged <13 years) to collect information and verify the case report data including demographics and exposure categories, and to offer assistance with notification of partners and referral to available health and social services. In some instances, the newly reported case might represent a prevalent case that has not previously been reported to public health. Such a patient might have been aware of the infection and receiving medical treatment for a long time. If this circumstance arises, advise the provider that the reason the case is being investigated now is that a record search indicates that the case had not previously been reported.

- 2. Newly-diagnosed HIV cases should be interviewed to (1) identify sex partners and others at risk for testing and counseling to reduce their own risk of infection, and (2) assure the case has been referred for medical and social services. Early medical intervention prolongs survival and reduces risk of transmission.
- 3. Interview the case following the Patient Interview Form and Instructions (Appendix 2), then enter the information in the appropriate areas of the "Basic," "Risk" and "Clinical" tabs of the Orpheus case report. If the patient provides "Basic" or "Risk" information that contradicts information collected from health care provider/s, overwrite the provider response with the patient response and make a note of the change in the notes section of the Orpheus case report. (In cases where the patient is aged <13 years, speak with the parent or legal guardian first. Exercise professional judgment about the need to interview the child separately or in the presence of the parent or guardian.)
- 4. During the case interview, ask the case to identify individuals at risk of infection (contacts) and develop a plan for notification and testing of contacts. A contact form should be completed for each named contact (Appendix 2). Individuals at risk include any sex partners within the previous year, or people with whom the case might have shared injection drug use equipment. Ideally, notification of contacts should be done by the LPHD. If the case prefers to notify contacts him(her)self, the LPHD should make arrangements to follow-up with the case to verify that those contacts have been notified. Sometimes hybrid approaches are successful such as making plans with the case to conotify. For example, the case tells the partner to expect a call from the local health department to offer services and information. Motivational interview techniques, including role playing with the case the response of the partner can help the case feel competent to handle the conversation. Record the date of the case interview and the names and other identifying information in the contact section of the Orpheus case in addition to the details of any medical referrals (follow-up tab).
- iv. LPHA's may not have available staff that is specifically trained to interview HIV cases for the purpose of identifying sexual partners and other at-risk contacts. Oregon Health Authority, HIV and STD Program (HST) staff are available for consultation about HIV case interviews and follow-up. In special circumstances, HST can conduct the interview at the request of the local public health authority. These circumstances might include high priority infections such as new infections in pregnant women, evidence of a cluster. In some cases, the health care provider may indicate that he/she would like to advise the patient of the impending contact by the LPHA Generally LPHA should not contact the patient prior to advising the health care provider. This is a matter of professional courtesy. In addition, on occasion, the case might not yet have been notified of the infection. Receiving this information from the LPHA might be awkward, at the least. Rarely, a medical provider may believe that direct contact by a public health representative would be detrimental to the health or well-being of patient or his contacts. Such instances should be noted in the comments section of the case report from and discussed with the HIV Surveillance Program (971-673-0153)
- v. If you used a paper case report form rather than completing the case report online, send the completed case report form to HST HIV Data and Analysis Program by secure fax (971-673-0179) or by secure file transfer protocol or other secure transmission methods. To arrange for alternate forms of secure data transmission, call the HIV Data and Analysis Program at 971-673-0183.

b. Suspect Case (See §3B)

i. Contact the patient's physician(s) and/or reporting laboratory to determine whether laboratory confirmation of HIV infection has ever been collected from this patient. Advise the physician or other regular health care provider that laboratory testing history suggests that the patient may have a case of HIV infection or AIDS and a record search indicates that the case has not previously been reported. If laboratory evidence of HIV infection is verified (See §3A), the case may be called confirmed and should be investigated as in §4A1. If laboratory confirmation of infection cannot be verified, no additional investigation is necessary.

5. CONTROLLING FURTHER SPREAD

A. Patient/Household Education

If the patient is not receiving HIV related medical or supportive services, refer the patient to a case management resource. Case managers can provide support and access to a variety of HIV related services including medical care, health insurance, prescription drugs, dental care, mental health and substance use treatment, risk reduction and treatment adherence counseling, housing, transportation, food and utility assistance. Case management services are available in every county.

1. Case management resources:

Portland Metro area

Counties	Agency	Phone	Email/Website
Clackamas, Columbia, Multnomah, Washington, and Yamhill counties in Oregon, and Clark County in Washington	Cascade AIDS Project	(503) 223-2437, (800) 777-2437, (800) 499-6940 en español	www.oregonaidshotline.com/

Balance of State (all counties outside of the Metropolitan area)

Counties	Agency	Phone	Email/Website
Coos, Curry, Douglas, Jackson, Josephine, Klamath, Lake, Lane, Lincoln Marion,	HIV Alliance	(541) 342-5088 1-866-470-3419	www.hivalliance.org
Baker, Gilliam, Grant, Harney, Malheur, Morrow, Sherman, Umatilla, Union, Wallowa, Wasco, Wheeler	EOCIL	(541) 889-3119	www.eocil.org
Linn/Benton	Linn County Dept of Health	(541) 967-3888	
Clatsop	Clatsop County Health and Human Services	(503) 325-8500	
Crook	Crook County Health Department	(541) 447-5165	
Deschutes	Deschutes County Health Department	(541) 322-7400	
Hood River	Hood River County Health Department	(541) 386-1115	
Jefferson	Jefferson County Health Department	(541) 475-4456	
Polk	Polk County Health Dept.	(503) 623-8175	
Tillamook	Tillamook County Health Office	(503) 842-3900	

2. Other statewide resources

- Oregon AIDS/STD Hotline (English: 800-777-2347; Spanish: 800-449-6940)
- CAREAssist(Oregon's AIDS Drugs Assistance Program) helps people living with HIV pay for medical care expenses, insurance, medical visits and prescription medications. (971-673-0144, www.healthoregon.org/careassist)
- The Oregon Helpline provides crisis intervention and referral to substance use and mental health treatment. Oregon Helpline (1-800-923-4357). Available 24 hours a day, 7 days a week.
- 3. Unusual cases such as transfusion, transplant, or hemophilia-associated disease; cases with

occupational exposure or cases with no identified risks should be discussed with HST Epidemiologists (971-673-0153).

B. Isolation of Case

Not applicable unless otherwise indicated for specific infections that occur in patients with AIDS.

C. Occupational Restrictions

None. The Americans with Disabilities Act prohibits workplace discrimination against HIV-infected individuals.

D. Restrictions on Household Contacts

None.

E. Protection of Contacts

- 1. Offer assistance with notification and referrals of partner. If the patient desires assistance with partner counseling (notification) and referall, refer to LPHA disease investigation specialist (DIS) or to State DIS Services (971-673-0157). Sexual and/or drug sharing partners of case-patients should be offered HIV testing and counseling to reduce risk of infection. Request assistance from local health department DIS or State DIS Services when case-patients have anonymous sex contacts (e.g. internet sex seekers) who may be challenging to contact.
- 2. Patients and their sex or drug sharing partners should be counseled about the ways that HIV can be transmitted including through sex, sharing of drug injection equipment, from pregnant woman to fetus or newborn infant, and by transfusion or transplant of blood or tissue.
- 3. HIV-infected patients should not share needles or drug supplies with others or engage in unprotected oral, vaginal or anal sex. A new, intact, latex condom should be used for each act of oral, vaginal, or anal sex between the patient and a partner.
- 4. Patients and their sexual or needle sharing partners should not donate blood, plasma, organs for transplantation, tissues, cells, semen for artificial insemination, or breast milk for human milk banks.
- 5. Universal precautions should be observed for all patients in health care settings and by household contacts who may come into contact with blood or body fluids of the patient. (Universal Precautions for Prevention of Transmission of HIV and Other Bloodborne Infections. Centers for Disease Control and Prevention. 1996. (Available at http://www.cdc.gov/ncidod/dhqp/bp_universal_precautions.html). These include:
 - a) Use of gloves, gowns, masks, and other protective barriers to prevent skin and mucous membrane exposure during contact with any patient's blood or body fluids.
 - b) Precautions to prevent injuries caused by needles, scalpels, and other sharp instruments or devices during procedures; when cleaning used instruments; during disposal of used needles; and when handling sharp instruments after procedures. To prevent needlestick injuries, needles

should not be recapped by hand, purposely bent or broken by hand, removed from disposable syringes, or otherwise manipulated by hand. After they are used, disposable syringes and needles, scalpel blades, and other sharp items should be placed in puncture-resistant containers for disposal. The puncture-resistant containers should be located as close as practical to the use area. All reusable needles should be placed in a puncture-resistant container for transport to the reprocessing area.

F. Environmental Measures

Surfaces or items contaminated with blood, body fluids or excretions or secretions visibly contaminated with blood should be cleaned with 10% bleach solution.

6. SPECIAL SITUATIONS

A. Case has been a Blood or other Tissue Donor

If a reported case has donated blood, plasma, sperm, tissue or other body organs since 1978, obtain details of all donations, including date(s), type(s), and site(s) of donation. Verify that recipient agency (e.g., the Red Cross) has been informed. Enter the details in Orpheus using the notes section associated with the case.

B. Case has been Convicted of a Sex Crime

- 1. Obtain information on circumstances of exposure from court records and prosecuting district attorney. Based on information obtained assess whether HIV transmission was possible.
- 2. Review internal program guidelines and consult with program manager regarding next steps. If the case involves children under the age of 18 years at the likely time of exposure, consult with program manager regarding the need to report the case to the Children's Services Division. Consult with HST staff before notifying victims. If the case involves child molestation, Children's Services Division will need to be involved.

C. Case has Un-notified Sex Partners or Other At-risk Contacts

Optimally, notification of sex partners and other at-risk contacts will be done with the full knowledge and collaboration of the source case. As noted above (§4A1.iv), newly-diagnosed HIV cases should be interviewed to identify sex partners and others at risk for testing and counseling to reduce their own risk of infection, and (§4A1.iv) a plan should be developed for notification and testing of contacts. Other than the responsibility to investigate and control communicable disease according to "procedures outlined in the Authority's Investigative Guidelines" (OAR 333-019-0000), Oregon law does not explicitly require notification of sex partners or other at-risk contacts of HIV cases. However, in some instances the Local Public Health Administrator or Oregon Health Authority may notify sex partners and other at-risk contacts without the knowledge of, or against the wishes of the source. Oregon law (ORS 433.008) permits the Oregon Health Authority and Local Public Health Administrators to release information obtained during investigation of a reportable disease to a person who may have been exposed to a communicable disease. The law permits the Authority or the Local Public Health Administrator to release individually identifiable information if there is clear and convincing evidence that the release of information is necessary to avoid immediate danger to other individuals or to the public. An example of a circumstance where the Local Public Health Administrator might judge that notification against the source patient's wishes would be a circumstance where a sexual contact is pregnant or known to be HIV-negative. In such circumstances a plan for notification should be established with the Local Health Officer or HST Epidemiologist. Before proceeding LPHA should assure that the case has received counseling about HIV infection,

that confirmatory testing has been done, that the case has received appropriate referrals for medical evaluation and follow-up, and that all reasonable efforts to convince the patient to notify partner(s) him(her)self have failed.

D. Case is a Health Care Worker

Health care providers who routinely participate in procedures that pose a significant risk of bleeding into a patient are encouraged to voluntarily find out if they are HIV-infected. Infected health care workers are encouraged to ask their employer, the LPHA or HST to review their professional practices, to minimize risk of transmission, or to refrain from participating in such procedures.

E. HIV Co-Infected Gonorrhea or Syphilis Case

People with cases of gonorrhea and/or syphilis should be asked about HIV status and tested for HIV. If a person with established HIV infection develops a new case of gonorrhea or syphilis LPHA should offer partner notification and referral regardless of whether or not this was offered at the time of the HIV case report. Notification of potential exposure to gonorrhea and/or syphilis should be accompanied by notification of exposure to HIV and testing offered for HIV in addition to gonorrhea and syphilis and treatment of bacterial sexually transmitted infections.

Introduction to Syphilis Case Management

General Assumptions/rules

- Syphilis is almost always sexually acquired/transmitted.
- A Syphilis case has only one source, but may spread the infection to many people. Once a case is infected and untreated, he or she will not be infected by others.
- A Syphilis blood test performed during someone's incubation period will be NEGATIVE, even though they have been infected with T. Pallidum
- A blood test for Syphilis will turn reactive or positive once the incubation period is over, and symptoms will develop. The FTA, TPPA and/or a Darkfield will turn reactive before an RPR.
- Syphilis is almost always acquired from someone who was in the Primary Stage (i.e., Lesion), and people in Primary are very infectious. Primary symptoms can last between 1-5 weeks.
- Syphilis is occasionally acquired from someone in the Secondary Stage (e.g., Mucous Patches).
 Secondary symptoms can last between 2-6 weeks.
- The latent (no symptoms) period between Primary and Secondary is 0-10 weeks, with the average being 4 weeks.
- Outside of Primary Syphilis and Secondary Syphilis, infected persons are generally not contagious.
- Syphilis cases should be staged as one of the following: Primary, Secondary, Early-Latent, Late-Latent, Late, or Congenital. Some cases may have neurological complications.
- Not everyone with a reactive serology will be a case. For example, those with previous histories
 of having Syphilis may have reactive serologies for many years post-treatment. Also, an FTA or
 TPPA that is non-reactive would rule out Syphilis and thus be considered a biological falsepositive.
- Clients with Syphilis can be re-infected post-treatment. The determination for re-infection is usually made through either clinical evaluation (i.e., new symptoms present) or at least a 2-dil (4-fold) rise in titer. When relying on a rise in titer only, please consult with the attending physician for his/her impression, or consult with the local Health Officer or Dr. Sean Schafer at the Oregon Health Authority. General, non-clinical questions can be directed to your regional state Disease Intervention Specialist.

General Assumptions/rules – PRIMARY

- Client is infectious with primary lesion present at time of diagnosis/treatment.
- Primary lesion lasts 1-5 weeks without treatment, with an average duration of 3 weeks.
- Client was infected within the previous 90 days PRIOR TO onset of lesion (this is also the interview period).
- Client, based on general averages, was likely infected 21 days (3 weeks) PRIOR TO the onset of lesion (client should name sex partner during this time).
- Client should be treated with 2.4 million units of Benzathine Penicillin G (Bicillin LA) x 1 or Doxy 100mg BID x 14d. (Preferably, Doxy is reserved for use in those clients who are Pen allergic).
- Sex partners named to client with last sexual exposure within 90 days of client
 diagnosis/treatment should be offered testing AND treatment in case they are infected or
 incubating. Sex partners with last sexual exposure greater than 90 days from client's
 diagnosis/treatment should be tested only, unless clinical manifestation of infection is present,
 or other considerations compel treatment.

General Assumptions/rules – SECONDARY

- Client presents with Secondary symptom such as Generalized Body Rash, Palmar Plantar Rash,
 Alopecia, Mucous Patches, Condylomata Lata at time of diagnosis/treatment.
- Typically, only Mucous Patches and Condylomata Lata are infectious symptoms in Secondary Syphilis; other symptoms associated with Secondary are not typically infectious.
- Client was infected within the previous 6.5 months PRIOR TO onset of Secondary symptom (this is also the interview period).
- Secondary Symptoms usually last 2-6 weeks without treatment, with an average duration of 4 weeks.
- Patient likely had a primary lesion resolve 4 weeks prior to the onset of Secondary symptoms.
- Client should be treated with 2.4 million units of Benzathine Penicillin G (Bicillin LA) x 1 or Doxy 100mg BID x 14d. (Preferably, Doxy is reserved for use in those clients who are Penicillin allergic).
- Sex partners named to client with last sexual exposure within 90 days of client diagnosis/treatment should be offered testing AND treatment in case they are infected or incubating. Sex partners with last sexual exposure greater than 90 days from client's diagnosis/treatment should be tested only, unless clinical manifestation of infection is present, or other considerations compel treatment.

General Assumptions/rules – Early Latent

- Early Latent is Syphilis in duration of less than one year.
- Client presents with no signs/symptoms at the time of diagnosis/treatment.
- At least one characteristic exists to help determine if client is Early Latent:
 - o RPR negative within the preceding 12 months
 - Solid recollection of Primary and/or Secondary symptoms within the last year
 - Related to (i.e., named by or named to) other early, primary and/or secondary Syphilis cases
 - o Solid recollection of Primary and/or Secondary symptoms on partner within last year
- Client was infected within the previous 12 months. This is the interview period for contacts. History of a negative RPR during the previous 12 months shortens the interview period to the point of the date of the negative RPR.
- Client should be treated with 2.4 million units of Benzathine Penicillin G (Bicillin LA) x 1 or Doxy 100mg BID x 14d. (Preferably, Doxy is reserved for use in those clients who are Pen allergic).
- Sex partners named to client with last sexual exposure within 90 days of client diagnosis/treatment should be offered testing AND treatment in case they are infected or incubating. Sex partners with last sexual exposure greater than 90 days from client's diagnosis/treatment should be tested only, unless clinical manifestation of infection is present, or other considerations compel treatment.

Contacts Named to Primary, Secondary, or Early Latent Syphilis Cases

- Contacts named to Primary, Secondary, or Early Latent cases should be <u>tested and treated</u> if
 <u>exposure (e.g., last sexual contact) occurred within 90 days</u> prior to the diagnosed case being
 treated. If the contact refuses treatment at this time, contact should be retested 90 days later,
 post-incubation period, to ensure that client did not go onto develop disease after incubating
 Syphilis.
- Contacts named to Primary, Secondary, or Early Latent cases should be tested only if <u>exposure</u> (<u>e.g., last sexual contact</u>) <u>occurred greater than 90 days</u> prior to the diagnosed case being treated. Follow-up testing is not required. Treatment should be considered if the contact presents with signs or symptoms suggestive of Syphilis, regardless of last exposure.
- The 90 day rule is not a hard and fast rule in the sense that client memories may be off, so use professional judgment of the situation if the last exposure date is anywhere near the 90 period. Many providers will err on the side of precaution in this case and treat in addition to testing.

General Assumptions/rules – Late Latent

- Late latent Syphilis is Syphilis in duration of greater than one year.
- Client presents with no signs/symptoms at the time of diagnosis/treatment.
- Client has no recollection of symptoms on self or partner.
- Client does not recall or does not have negative RPR result in the last year.
- Client is not known to be related to other recent early or infectious cases.
- It is unknown when client was infected.
- Clients typically do not need a comprehensive interview, beyond establishing whether there
 were signs/symptoms at time of treatment or within the last 12 months, whether a negative
 RPR in the last 12 months exists, or whether client is related to other recent cases.
- The most recent sex partner to a Late latent case should be offered a Syphilis blood test to rule out the possibility of either a new infection or concurrent longer-term infection.
- Client should be treated with 2.4 million units of Benzathine Penicillin G (Bicillin LA) x 1 weekly for three weeks for a total regimen of 2.4 million units of Bicillin x 3 (7.2 mu in sum), or Doxy 100mg BID x 28d.

General Assumptions/rules – Latent Unknown Duration

- Use general assumptions/rules described in Early Latent and Late Latent cases to determine whether client is either Early Latent or Late Latent.
- If still unsure, use an interview period of one year and test partners. If partners start to show up with reactive tests, then consider whether original case is an Early Latent case. Reassess whether partners should be treated using the 90-day incubation rule.

Late Syphilis (Clinical Manifestations)

• Consult with provider or Health Officer regarding treatment plan. In the alternative, consult with Dr. Sean Schafer at the Oregon Health Division, 971-673-0181.

Neuro Syphilis Complication

 Neuro Syphilis can often times accompany early stages of Syphilis, especially in immunocompromised patients.

- Ocular syphilis, a clinical manifestation of neurosyphilis, can involve almost any eye structure, but posterior uveitis and panuveitis are the most common. Additional manifestations may include anterior uveitis, optic neuropathy, retinal vasculitis and interstitial keratitis
- If there is a corresponding stage of Primary (lesion present), Secondary (e.g., rash), Early Latent (e.g., negative RPR in the preceding 12 months), then interview for the appropriate stage and manage sex partners as described above for each stage. Report infection as either Primary, Secondary, or Early Latent accordingly, neuro-complication should be noted in the report.
- Patients suspected of neuro complications should be referred for a Lumbar Puncture and CSF-VDRL testing, if possible.
- Patients diagnosed with neuro complications related to Syphilis will ultimately need to be treated with IV penicillin. Please see the State Investigative Guidelines, the CDC STD Treatment Guidelines, or consult with Provider, Health Officer or Sean Schafer at the Oregon Health Authority.





800 NE Oregon Street, Suite 1105 Portland, OR 97232-2187 Voice 971-673-0153 Fax 971-673-0178 www.healthoregon.org/std

Clinical Advisory: Ocular Syphilis in Oregon April 2, 2015

This is to request that you report cases of suspected ocular syphilis to the Oregon Health Authority's Sexually Transmitted Disease Program within one business day of the patient's presentation. Cases can be reported to Dr. Sean Schafer at (971) 673-0181 or sean.schafer@state.or.us. We remind you that Oregon Administrative Rules already require that all suspected syphilis cases be reported to the local health authority within one business day of presentation.

Since December 2014, an unusually high number of ocular syphilis cases with severe sequelae, including blindness, have been identified in Oregon, California and Washington. During this time, physicians in Oregon have diagnosed and treated five reported cases of syphilis with ocular involvement; four other reported syphilis cases had possible ocular involvement. Of the five known cases, all occurred in men, two had HIV infection, two reported sex with men and two reported sex with women. Two of the five had secondary syphilis at the time of diagnosis. For comparison, during December 2013 through March 2014, only one case of ocular syphilis was identified in Oregon. Most of the recently reported cases of ocular syphilis in other states have occurred among HIV-infected men who have sex with men (MSM); a few cases have occurred among HIV-uninfected persons including heterosexual men and women.

Prompt reporting will facilitate timely specimen collection and molecular testing to further characterize strains of *Treponema pallidum* (the bacterium that causes syphilis) that might be associated with ocular syphilis; timely clinical treatment; and delineation of the extent of this apparent increase in ocular syphilis — including whether groups other than MSM are being affected.

Neurosyphilis can occur during <u>any</u> stage of syphilis, including primary and secondary. Ocular syphilis, a clinical manifestation of neurosyphilis, can involve almost any eye structure, but posterior uveitis and panuveitis are the most common. Additional manifestations may include anterior uveitis, optic neuropathy, retinal vasculitis, and interstitial keratitis. All patients with suspected neurosyphilis should have cerebrospinal fluid evaluation with VDRL testing of spinal fluid. In contrast to patients without neurologic involvement, patients with neurosyphilis should be treated with 18–24 million units per day of penicillin G divided into 6 doses and given intravenously every 4 hours for 10 to 14 days.

Oregon Syphilis Reactor Grid - (Updated 1/16/2015)

In contrast to many other infectious diseases, in which a positive diagnostic test generally indicates active infection, the likelihood that a reactive serological test for syphilis (STS) indicates active, untreated infection may be related to the titer and age of the patient. Because the resources necessary to conduct case investigations are frequently limited, especially in high morbidity areas, health departments often develop guidelines to ensure that disease intervention is worthwhile and effective. On the basis of such guidelines, some health departments choose not to evaluate or contact individuals whom they determine to be at low risk of having or transmitting active disease. As a result, older men and women, or persons with low titers may not be contacted, evaluated or reported. The administrative tool used to make this determination is generally referred to as a "reactor grid" and may include the age, sex, and nontreponemal serum assay titer. Regardless of local priorities and guidelines, positive STS should be evaluated for all persons in the following situations:

- Individuals with reactive serologies who are known or suspected of having lesions should be contacted for follow-up regardless of age, sex, or titer.
- All women known to be pregnant should be contacted for follow-up regardless of age or titer.
- All women of child-bearing age (less than 45 years of age) should be contacted for follow-up, regardless of titer.
- All adolescents (< 20 years old) should be contacted for follow-up regardless of titer.
- Individuals with reactive serologies indicating a four-fold titer increase (two tube dilution) from a previous serology should be initiated for follow-up regardless of age or titer.

http:/	/www.cdc.gov	v/std/svi	phsurvreco.pdf

Age	Confirmatory Trep only e.g., FTA-ABS (R, 2+, 3+, 4+), TPPA (R)	Other Trep (reverse sequence), e.g. Trep Ab (R), EIA (R), IgG (>0.8); if RPR NR obtain FTA/TPPA result	Non- Treponemal test, e.g., VDRL, RPR 1:1	1:2	1:4	1:8	1:16	>1:32
0-19	1	1	1	1	1	1	1	1
20-29	1	1	1	1	1	1	1	1
30-39	1	1	1	1	1	1	1	1
40-49	1	1	1	1	1	1	1	1
50-59	2	2	1	1	1	1	1	1
60-69	2	2	2	2	2	1	1	1
70+	3	3	3	3	3	3	2	2

KEY:

1 = Initiate to Field 2 = Query Letter to Provider, initiate if clinically indicated 3 = Administrative Closure, no public health follow up

Confirmatory Treponemal tests: **FTA** = Fluorescent Treponemal Antibody Absorption Test; **TP-PA** = *Treponema pallidum* Particle Agglutination Assay

Reverse sequence treponemal tests: **Trep Ab** = Treponemal Total Antibody test; **IgG** = detects IgG antibodies to T. pallidum proteins **EIA** = Enzyme immunoassay

RPR = Rapid Plasma Reagin (Non-Treponemal screening test; also used as confirmation in Reverse Sequencing); VDRL = Venereal Disease Research Laboratory (Non-Treponemal screening test; also used as confirmation in Reverse Sequencing)

SYPHILIS QUERY

Your laboratory reported positive lab results to the County Health Department or the Oregon Health Authority for one of your patients. The Health Department follows up on all reported incidents or possible incidents of Syphilis. Please complete this report at your earliest convenience and return it to the County Health Department via fax at XXX-XXX-XXXX, or call at XXX-XXXX. Thank you.

Demographics:
Patient:
DOB:
Address:
Phone:
Alternate Contact:
Ok for Health Department to contact patient for follow-up? Yes or No
Medical:
Reason for Visit:
Test Results:
Screening (e.g., RPR) and date
Confirmatory (e.g., FTA) and date
Cerebral Spinal Fluid VDRL (if done) and date
Previous RPR history (test and dates)
<u>Diagnosis and Stage (Please check one)</u> : http://www.cdc.gov/std/treatment/2010/genital-ulcers.htm#syphilis
Primary (e.g., lesion present at time of exam or treatment): Yes or No
Secondary (e.g., body rash at time of exam or treatment): Yes or No

If YES, duration? Early: Less than one year (e.g., Syphilis symptoms in last 12 mo. or documented Negative RPR in last 12 mos?) Yes or No Late: Greater than one year: Yes or No **Tertiary** (e.g., gummas present, Cardiovascular): Yes or No Was Neurosyphilis (e.g., CNS involvement or CSF abnormalities) present as a complication: Yes or No Treatment or Plan (fill in or circle below): _____ CDC Treatment recommendations for non-penicillin allergic patients: http://www.cdc.gov/std/treatment/2010/genital-ulcers.htm#syphilis **Primary**: Benzathine penicillin G 2.4 million units IM in a single dose **Secondary**: Benzathine penicillin G 2.4 million units IM in a single dose Early-Latent: Benzathine penicillin G 2.4 million units IM once Late-Latent: Benzathine penicillin G 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals **Tertiary** Benzathine penicillin **G** 7.2 million units total, administered as 3 doses of 2.4 million units IM each at 1-week intervals Neurosyphilis: Aqueous crystalline penicillin G 18–24 million units per day, administered as 3–4 million units IV every 4 hours or continuous infusion, for 10–14 days (For penicillin-allergic patients, HIV-infected patients and further Syphilis discussion, please refer to the CDC treatment guidelines: http://www.cdc.gov/std/treatment/2010/genital-ulcers.htm#syphilis) Date treatment begins: Date treatment ends (if applicable): **History of HIV infection?** Yes or No Form completed by and date:_____

Latent (no signs or symptoms present at time of exam): Yes or No

Syphilis Staging Chart

Chancre (most infectious stage) Inguinal lymphadenopathy, fever Secondary syp Generalized body rash Primary syphi Usually singular, firm, round, a painless. Most common Sx. INFECTIOUS Not always present Secondary syp Protean – faint coppery macu	ilis: (710)
Chancre (most infectious stage) Usually singular, firm, round, painless. Most common Sx. INFECTIOUS Inguinal lymphadenopathy, fever Secondary syp	and Symptoms last 1- 5 weeks (3 week average) Interview period: 90 days PRIOR to onset of lesion Partner management: If partner exposed within 90 days of diagnosed case treatment, then partner should be tested AND treated per CDC and State Guidelines. If exposed greater than 90 days, testing is
(most infectious stage) painless. Most common Sx. INFECTIOUS Not always present Secondary syp	(3 week average) Interview period: 90 days PRIOR to onset of lesion Partner management: If partner exposed within 90 days of diagnosed case treatment, then partner should be tested AND treated per CDC and State Guidelines. If exposed greater than 90 days, testing is
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	within 90 days of diagnosed case treatment, then partner should be tested AND treated per CDC and State Guidelines. If exposed greater than 90 days, testing is
	3
Generalized hody rash Protean - faint connery macu	
Palmar plantar rash Penny to dime size rash appear together on palms of hands an	aring (4 week average)
Mucus patches Penny to dime size patches in mouth, INFECTIOUS	
Alopecia Temporary hair loss, usually in	n patches Partner management: If partner exposed
Condylomata lata Multiple lesions which occur i moist places such as the groin external genitals or axillae, ve painful and odorous. INFECTI	treatment, then partner should be tested AND treated per CDC and State Guidelines.
Early latent syphilis = Organisms persist without	t symptoms: infection of 1 year or less (730)
The interval between the resolution of secondary symptom 6.5 months after infection/exposure), and one year after infection/exposure. Identified by any one or more of the form	of treatment following:
 RPR negative within the preceding 12 months Solid patient recollection of Primary and/or Seconda symptoms within the last year Related to (i.e., named by or named to) other early, 	treatment, then partner should be tested
 and/or secondary syphilis cases Solid recollection of Primary and/or Secondary symp partner within last year 	If exposed greater than 90 days, testing is

- No signs or symptoms at the time of treatment
- No documented or recalled negative RPR in the last year
- No signs or symptoms suggestive of Primary or Secondary syphilis noted on partner
- May also clinically include "Unknown duration"
- Low-Priority public health follow up

Interview period: No specific interview period due to unknown length of infection

Partner Management: Current or most recent sex partner should be tested

Syphilis Staging Chart

Late Syphilis = Symptomatic late stage Syphilis (750)

- Refers to gumma or cardiovascular Syphilis, but not to all Neurosyphilis
- Not contagious
- Usually takes years to reach this stage of the infection, e.g., 30-40 years, possibly except in the case of immunocompromised persons where progression to this stage may happen sooner

Interview period: Public Health follow-up not required in terms of interview

<u>Partner Management:</u> Public Health follow-up not required in terms of partner follow-up.

Public Health completes case report in Orpheus for disease reporting purposes

Neurosyphilis (Complication of Syphilis – not a separate stage)

Manifestations of meningitis, ocular syphilis (posterior uveitis), hearing loss, arteritis leading to stroke, paresis, diseases of posterior columns of spinal cord & dorsal roots

Dementia paralytica, tabes dorsalis (late syphilis)

Many of symptoms can occur at any time during any stage of syphilis. Others such as dementia paralytica, tabes dorsalis are associated exclusively with late syphilis.

Diagnostic test: CSF-VDRL via Lumbar Puncture (recommended)

<u>Interview period</u>: Interview period depends on what stage of syphilis the client is in (see above staging)

<u>Partner Management:</u> Partner management depends on what stage of syphilis the client is in (see above staging)

Labs:

Traditional Method: Non-treponemal (i.e., RPR+) confirmed by treponemal (e.g., FTA or TPPA)

Reverse Sequence Method: Treponemal (e.g., Trep Ab, EIA, IgG reactive) confirmed by non-treponemal (e.g., RPR, VDRL). If Treponemal is reactive and non-Treponemal is non-reactive, then tie-breaker required with either TP-PA or FTA.

Orpheus Case Definition:

Confirmed = Did the provider see the bug (spirochete) at the time of diagnosis?

Presumptive = Lab confirmed, e.g. RPR (pos/neg) with FTA+-or-Treponemal (Trep Ab/EIA/IgG)+ with RPR or TPPA/FTA+

Syphilis Lab Testing Methodologies

There are currently two serologic testing methodologies used to help determine if a patient has a case of Syphilis:

<u>Traditional Method</u> – a treponemal test confirms the non-treponemal test, such as an FTA or TPPA confirming an RPR or VDRL if positive.

Non-treponemal (screening) test: RPR, VDRL

Treponemal (confirmatory): FTA, TPPA

- 1. RPR reactive + FTA/TPPA reactive = case or previous case
- 2. RPR reactive + FTA/TPPA non-reactive = no case/biological false positive
- 3. RPR non-reactive + FTA/TPPA non-reactive = no case/not syphilis
- 4. RPR non-reactive + FTA/TPPA non-reactive = no case
- 5. FTA/TPPA minimally reactive or FTA 1+ = Consult with clinician. If no previous history of syphilis or positive RPR, most likely no case. If positive RPR or history of syphilis, conduct alternative treponemal test (e.g. TP-PA, MHTP, IGG, etc.)

<u>Reverse Sequence Method</u> – the non-treponemal test is used to "confirm" the treponemal test, such that an RPR or VDRL would confirm the Trep Ab/EIA/IgG if positive. If the initial Treponemal test is positive, then RPR or VDRL is done to confirm result. If RPR or VDRL is negative after a positive treponemal test, then a tie-breaker test must be done (FTA or TPPA).

Treponemal test: (a.k.a. Trep Ab, EIA, IgG)

Non-treponemal test: RPR, VDRL

Tie-breaker test: FTA/TPPA

- 1. Trep Ab/EIA/IgG reactive + RPR reactive = case or previous case
- 2. Trep Ab/EIA/IgG reactive + RPR non-reactive = tie-breaker needed
- 3. Trep Ab/EIA/IgG reactive + RPR NR + FTA/TPPA R = case or previous case
- 4. Trep Ab/EIA/IgG reactive + RPR NR + FTA/TPPA NR = no case/false positive
- 5. Trep Ab/EIA/IgG non-reactive = not reflexed for further analysis or no case
- Typically, the difference between a new case and a previous case is that in the former a client has never been treated for syphilis before and has met the lab criteria above indicating a case; whereas in the latter, the client claims a previous verifiable history of syphilis with no new rise in non-treponemal titer (if there is a rise in titer, subject may be a new case (i.e., reinfection). Please consult the State Syphilis Investigative Guidelines and/or with your regional State DIS for more on the determination between a new case v. a previous case.

Expedited Partner Therapy (EPT) for Sexually Transmitted Diseases

Protocol for Health Care Providers in Oregon

Oregon Health Authority Center for Public Health Practice HIV/STD/TB Section





Principles of Expedited Partner Therapy for Sexually Transmitted Diseases

- Patient's diagnosis must be: Neisseria gonorrhoeae or Chlamydia trachomatis infection.
- **First-choice partner management strategy** is to attempt to bring partners in for complete clinical evaluation, STD testing, counseling, and treatment.
- The most appropriate patients for EPT are patients with partners who are unable to come in to be examined and treated or whom the clinician judges are unlikely to seek timely clinical services.
- EPT drug regimens:
 - Partners of patients diagnosed with chlamydia:
 - Azithromycin (Zithromax*) 1 gram (4 x 250 mg, 2 x 500 mg, or 1 x 1000 mg) orally, once
 - Partners of patients diagnosed with gonorrhea
 - Cefixime (Suprax*) 400 mg (4 x 100 mg, 2x 200 mg or 1 x 400 mg) orally, once
 AND
 - Azithromycin (Zithromax*) (1 gram 4 x 250 mg, 2 x 500 mg, or 1 x 1000 mg) orally, once
- Patients with gonorrhea and their partners who are seen in-person should be treated with the first line recommended treatment: ceftriaxone (250 mg intramuscularly) in addition to azithromycin. The second line treatment, cefixime, is recommended for EPT because it is taken orally.
- Number of partners that can be prescribed medication for EPT should be limited to the number of known sex partners in previous 60 days (or most recent sex partner if none in the previous 60 days).
- **Informational materials** must accompany medication and must include clear instructions, warnings, and referrals.
- **Patients should be counseled** to remain abstinent from sexual intercourse until seven days after treatment and until seven days after partners have been treated
- **Patient re-testing** for gonorrhea and chlamydia is recommended three months after treatment.
- By law, suspected sexual abuse must be reported by licensed health practitioners, including pharmacists. Sexually transmitted infections in adults aged 65 years and older, or in children aged less than 12 years (and up to age 18 years under some circumstances) may indicate sexual abuse. See
 - <u>http://www.oregon.gov/DHS/abuse/pages/mandatory_report.aspx</u> for additional information on mandatory reporting.

*Use of trade names is for identification only and does not imply endorsement.

Introduction

Expedited Partner Therapy (EPT), also known as Patient-Delivered Partner Therapy (PDPT), is the practice of treating sex partners of persons with sexually transmitted diseases (STD) without an intervening medical evaluation or professional prevention counseling. The goal of EPT is to increase partner treatment rates and thus to reduce re-infection rates of the index cases.

The Sexually Transmitted Disease Program of the Oregon Health Authority's Center for Public Health Practice recommends the judicious incorporation of EPT into a comprehensive STD program for controlling chlamydia and gonorrhea.

This document is intended to provide guidance for providers who wish to prescribe or dispense antibiotic therapy for the sex partners of patients infected with *Neisseria gonorrhoeae* or *Chlamydia trachomatis*.

Background

To prevent repeat infections, sex partners of patients with bacterial STDs must be provided timely and appropriate antibiotic treatment. However, because infected partners are often asymptomatic, they are unlikely to seek medical treatment. Even when doctors and other health practitioners counsel patients about the need for partner treatment, some sex partners have limited or no access to medical care or choose not to seek care.

Data from three randomized controlled clinical trials indicate that EPT is a useful option to facilitate partner management in heterosexual men and women with chlamydial infection. (1-3) The most important outcome among those treated with EPT was reduced rates of reinfection. Other benefits included equivalent or improved success in notifying partners and increased belief that partners were treated.

In May of 2005, the Centers for Disease Control and Prevention (CDC) sent out a "Dear Colleague" letter to care providers across the United States, concluding that EPT is a useful option to facilitate partner management and encouraging states and local health departments to work together to remove operational barriers to EPT.(4) That letter was followed in 2006 by release of a formal review of the evidence and guidance for implementation.(5) A 2012 update to the CDC 2010 STD Treatment Guidelines reiterated the recommendation to consider EPT for gonorrhea or chlamydia for partners of heterosexual patients in whom timely evaluation and treatment is unlikely.(6)

In June of 2009, the Oregon Legislature passed House Bill 3022, allowing the State's health professional regulatory boards to adopt rules permitting health care practitioners to prescribe treatment for sex partners of patients with certain sexually transmitted diseases without examining the partner. The legislation stipulated that a prescription issued in the practice of expedited partner therapy be valid even if the name of the patient for whom the prescription is intended is not written on the prescription.

The EPT legislation further directed the Oregon Health Authority to formulate guidance on the practice of EPT in Oregon and to specify the diseases for which the practice of EPT should be permitted. This document is intended to serve as the statutorily required guidance.

A Comprehensive Model of Control of STDs

Specific guidelines for the treatment of STDs have been updated for 2010 by the Centers for Disease Control and Prevention (available at: http://www.cdc.gov/std/treatment/).(7) A comprehensive model for controlling STDs should include:

- Collection of sexual history for all patients of reproductive age
- General STD prevention education and risk reduction counseling
- Appropriate screening and diagnostic testing for STDs
- Adequate treatment for diagnosed cases and their partners
- Reporting of notifiable conditions to local public health authorities

Infections for which EPT can be used in Oregon

Chlamydia trachomatis Neisseria gonorrhoeae

Basic principles to consider in the practice of EPT

- Health care practitioners must be responsible for making reasonable attempts to assure treatment of the sex partners of their STD-infected patients.
- EPT is not intended to be the first or best choice of treatment for partners of individuals diagnosed with chlamydia or gonorrhea. A medical examination of sex partners of STD patients with testing for sexually transmitted disease followed by treatment for presumed infection remains the preferred approach to assuring treatment of exposed partners.
- If a patient diagnosed with chlamydia or gonorrhea is accompanied by sex partner(s) at the time of their clinic visit for treatment of the STD, the health care provider should ensure that these partner(s) are examined, tested and treated during that visit.
- EPT can serve as a useful alternative when the health care practitioner judges that one or more sex partners of the diagnosed patient are unlikely to seek or successfully obtain timely medical evaluation and treatment.
- The most appropriate patients for EPT are the male partners of women with a laboratory-confirmed diagnosis of chlamydia or gonorrhea. Clinicians may also choose to provide EPT for female partners of male patients with Chlamydia. Male index patients (the patient with the original diagnosed case) should be informed that it would be best for their female partners to have a medical evaluation, but the clinician may opt to provide EPT, unless the partner is known to be pregnant.
- Medications should generally not be provided for pregnant partners; refer pregnant women to their prenatal care provider or another medical provider.
- Use of EPT for sexual partners of men who have sex with men is discouraged because of the relatively high prevalence of undiagnosed HIV infection among male partners of men with a sexually transmitted infection.
- EPT should not be used in Oregon to treat partners of women with trichomoniasis, or men and women with etiologically undefined clinical syndromes such as non-gonoccocal urethritis, mucopurulent cervicitis, or pelvic inflammatory disease

- without specific laboratory confirmation of *Chlamydia trachomatis* or *Neisseria gonorrhoeae*.
- By law, licensed health practitioners (including pharmacists), public health employees, and others must report suspected sexual abuse in the adults aged 65 years or more and in children aged less than 12 years (and up to age 18 years under some circumstances) to authorities. Sexually transmitted infections in children and the elderly can be a sign of abuse. See http://www.oregon.gov/DHS/abuse/pages/mandatory_report.aspx for additional information on mandatory reporting.

Specific Guidance on Expedited Partner Therapy in Oregon

- If the partner (or partners) are not present at the time of the infected patient's clinic visit, the provider should inform the patient that it would be best to have all partners thought to have been exposed during the previous 60 days come into a clinic for examination, testing and treatment. However, if treatment is not otherwise assured, the patient should be provided prescriptions for antibiotics, or dispensed the antibiotics, for their partner(s).
- EPT should not be used for the partners of the partners to the index case. Additional partners of a partner who is given EPT should be encouraged to seek medical evaluation, especially if they are experiencing symptoms of an STD.
- Prescriptions or medications for EPT must include appropriate written information for the intended partner.
- If possible and practical, telephone contact should be made with the sexual partner(s) to explain the reason for providing EPT, to ask about other symptoms of STDs or complications that would indicate a need for medical evaluation (such as sores, ulcers, discharge, testicular pain, or abdominal pain), and to answer questions. Female partners should be asked if they are pregnant or breastfeeding. Partners should be advised to abstain from intercourse for seven days after taking the medication.
- Health care providers should document all EPT-related actions, including the number of partners who are being provided with EPT, the medication(s) and dosage prescribed or provided, whether or not the partners are known to be allergic to any medications, and the information sent along for the partner(s). Opinions differ on whether names of the partners, if known, should be documented in the patient's chart. The Sexually Transmitted Disease Program is not aware of any specific state or federal regulations or professional standards that specifically and definitively address this question. Determinations about whether to record partner names in patient medical records should be made at the facility or provider level in consultation with practitioner boards and legal counsel, if necessary.
- EPT may consist of either a prescription for antibiotics or provision of the appropriate antibiotic, along with relevant allergy and education information for the patient to give to his/her partners. The information provided to partners should specify that if they want to determine if they are infected, they must have a test for the disease before taking the treatment. Informational handouts for partners (in English and Spanish) are available on the STD Program website at http://www.healthoregon.org/std.

The health practitioner can request assistance for sex partner follow-up from their local health jurisdiction b) the patient is unable or unwilling to contact one or more partners; c) the patient has had 2 or more sex partners in the last 60 days; or d) the patient is a man who has had sex with other men (MSM). (Because over 14,000 reported cases of chlamydia occur in Oregon annually, local health authorities don't typically offer individual case or partner follow-up for most cases of chlamydia and for some cases of gonorrhea.)

Medication for EPT may be provided in the following ways:

- Medications may be provided to the index patient to take to his or her partner(s).
- Separate prescriptions may be written for the index patient and his or her partner(s).
- If the index patient is unwilling or unable to identify the partner(s) by name, the provider may write a prescription for an "[name of original patient]—Partner" (e.g., "Jane Doe—Partner" or "EPT Partner."
- EPT prescriptions not containing the name of the partner must be annotated with the phrase 'for EPT," or "EPT Prescription" or equivalent to alert the pharmacist that the prescription can be filled without a name under the EPT laws.

Key counseling messages when implementing EPT

- Patients and partners should abstain from sex for at least seven days after treatment and until seven days after all partners have been treated, in order to decrease the risk of re-infecting the index patient.
- Partners should seek a complete STD evaluation as soon as possible.
- Partners who have allergies to the prescribed/dispensed class of antibiotics, have kidney failure, liver disease, heart disease, or any other serious health problems, should not take the medication and should see a healthcare provider. If partners are unsure about any possible medication allergies or other health problems, they should consult a healthcare provider.

To ensure the effectiveness of patient delivered therapy, providers should schedule the patient to return for re-testing three to four months after treatment.

Recommended Treatments

For chlamydia:

Partners of patients with chlamydia should be treated with azithromycin 1 gram PO, unless the partner is allergic to macrolide antibiotics. In this situation, consult the MMWR STD Treatment Guidelines 2010 or contact a consulting physician for further instructions. Empiric co-treatment for gonorrhea is not recommended.

Although doxycycline might be the best option for treatment of a patient with chlamydia, the Sexually Transmitted Disease Program does not recommend its use for EPT for several reasons. Use of doxycycline for EPT has not been studied. Partner treatment of chlamydia infection with doxycycline requires a multi-dose, multi-day regimen compared with single dose treatment with azithromycin, and completion of EPT would be expected to be reduced. Doxycycline presents the potential for more frequent and potentially more significant

adverse events than azithromycin including fetal risks in the event of inadvertent treatment during pregnancy. Because of the potential for greater quantities of unused medicine with a multi-dose regimen, doxycycline probably presents a greater risk than azithromycin for adverse ecological outcomes.

For gonorrhea:

Partners of patients with gonorrhea treated by EPT should be treated with cefixime 400 mg orally, once and azithromycin 1 gram orally once at the same time as cefixime, unless the partner is allergic to cephalosporins or macrolide antibiotics. If the partner is allergic to either class of antibiotics, EPT is discouraged; the partner should be advised to seek timely evaluation and treatment in person.

Patients with gonorrhea and their partners who are seen in-person should be treated with the first line recommended treatment: ceftriaxone (250 mg intramuscularly) in addition to azithromycin. The second line treatment, cefixime, is recommended for EPT because it is taken orally.

Although doxycycline might be the best option for supplemental treatment of a patient with gonorrhea, the Sexually Transmitted Disease Program does not recommend its use for EPT for several reasons. Use of doxycycline for EPT has not been studied. Partner treatment with doxycycline requires a multi-dose, multi-day regimen compared with single dose treatment with azithromycin, and completion of EPT would be expected to be reduced. Doxycycline presents the potential for more frequent and potentially more significant adverse events than azithromycin including fetal risks in the event of inadvertent treatment during pregnancy. Because of the potential for greater quantities of unused medicine with a multi-dose regimen, doxycycline probably presents a greater risk than azithromycin for adverse ecological outcomes.

Payment for partner medications

At present, most partners will need to purchase medications prescribed through EPT. Presently, retail cost for a gram of generic azithromycin is \$5–\$20. EPT prescriptions may be covered by some health insurance plans. Patients, partners or health care providers should check with the partner's health insurance provider if the partner is insured.

Some STD clinics, community health centers, family planning clinics, school-based health centers and other settings might have medicines available to give directly to patients to give to partners. Partners to index patients diagnosed outside of one of the above settings may seek treatment in one of these settings, but should be clinically evaluated before medications are provided.

Additional Resources

Information regarding these recommendations should be directed to the STD Program in the at Oregon Public Health Division, 800 NE Oregon St., Ste. 1105, Portland, OR, 97232. Telephone 971-673-0153.

References

- 1 Golden MR, Whittington WL, Handsfield HH, et al. Effect of expedited treatment of sex partners on recurrent or persistent gonorrhea or chlamydial infection. N Engl J Med. 2005 Feb 17;352(7):676-85.
- 2 Kissinger P, Mohammed H, Richardson-Alston G, et al. Patient-delivered partner treatment for male urethritis: a randomized, controlled trial. Clin Infect Dis. 2005 Sep 1;41(5):623-9.
- 3 Schillinger JA, Kissinger P, Calvet H, et al. Patient-delivered partner treatment with azithromycin to prevent repeated Chlamydia trachomatis infection among women: a randomized, controlled trial. Sex Transm Dis. 2003 Jan;30(1):49-56.
- 4 Douglas J. Dear Colleague5-10-05. 2005 [cited August 16, 2006]; Available from: http://www.cdc.gov/std/DearColleagueEPT5-10-05.pdf
- 5 Centers for Disease Control and Prevention. Expedited partner therapy in the management of sexually transmitted diseases. Atlanta, GA: US Department of Health and Human Services; 2006.
- 6 Centers for Disease Control and Prevention. Update to CDC's Sexually transmitted diseases treatment guidelines, 2010: oral cephalosporins no longer a recommended treatment for gonococcal infections. MMWR Morb Mortal Wkly Rep. 2012 Aug 10;61(31):590-4. 7 Centers for Disease Control and Prevention. Sexually Transmitted Diseases Treatment Guidelines, 2006. MMWR. 2006;55(No. RR-11).

Revision History

February 2010. Original publication.

September 2012. Revision removed gonorrhea from the list of conditions for which EPT recommended and removed allusions to use of EPT for gonorrhea. Changes were made in response to concerns about increasing minimum inhibitory concentrations of cephalosporins for gonorrhea isolates and recommendation by Centers for Disease Control and Prevention that injectable ceftriaxone be the sole preferred medication for treatment of gonorrhea.

July 2014. Revision replaced gonorrhea among conditions for which EPT recommended. Changes were made amidst historic increases in gonorrhea incidence, reiteration of CDC recommendations for use of cefixime for EPT in gonorrhea cases despite retraction in 2012 of recommendation for cefixime as alternative treatment to ceftriaxone for index cases. In addition, gonococcal isolate surveillance continues to indicate that sensitivity to cefixime remains high in Oregon.

February 2015. Formatting update.



Expedited Partner Therapy (EPT)in Oregon

\STD PROGRAM

Frequently Asked Questions

Who can I contact if I have questions about procedures for administering expedited partner therapy in Oregon?

If you don't find the information you need among our EPT protocol and patient information sheets online, contact your local health department STD program or the STD Program at the Public Health Division (971-673-0153).

We are a local health department clinic. How should we track medicines dispensed for EPT?

Local health department clinics typically track STD medication using electronic or paper medication logs. For tracking EPT, we recommend making an original log entry for each individual course of partner treatment dispensed. The entry should document at least the name of the client who was diagnosed with the original infection, and the amount and type of medication dispensed, and the lot number of the medication. Some clinics will also choose to record the name of partner, if known, and to make a notation that written medication information was given to the original patient to be given in turn to the partner. This fact could also be recorded in the original patient's medical record.

To our knowledge, no specific regulations address the propriety of recording the name of the intended recipient of EPT. Some providers, clinics and facilities believe that they should not record the name of the partner in order to maximally safeguard his or her privacy since he/she did not provide general consent for treatment. Other providers believe that the name of the EPT partner, if known should be recorded. Individual clinics and practices will need to determine their own practices on this issue.

Should we report EPT prescribed or dispensed via Orpheus (Oregon Public Health Epidemiologists' User System)?

We will soon expand our reportable disease registry (Orpheus) at the Public Health Division Sexually Transmitted Disease Program to accept information about the number and type of EPT prescriptions written or dispensed for each Gonorrhea or Chlamydia case. In the meantime, some individuals have chosen to enter information about EPT prescribed or dispensed in the "notes" field in Orpheus.

What if a pharmacist isn't aware that it is permissible to fill an EPT prescription for a partner who is not named on the prescription?

You can refer the pharmacist to the Oregon Board of Pharmacy web site http://www.pharmacy.state.or.us/ where they can find information about the new statute and rules for EPT. Pharmacists with additional questions can contact the Board of Pharmacy front desk at 971-673-0001.

What if a female partner is pregnant?

Controlled trials of EPT to date have not typically included pregnant women. Treatment of sexually transmitted infection in a pregnant woman is particularly important to prevent premature birth and neonatal infections. Because of the severity of these potential complications, repeat testing after treatment to verify cure should be a special priority among pregnant women. In addition, because of the potential risks to fetus, testing her for other STDs such as hepatitis B, HIV and syphilis assumes greater importance.

For all of these reasons, we suggest that practitioners considering EPT inquire about whether a female partner might be pregnant. The practitioner should carefully weigh any decision to offer EPT to that partner against the potential risk that offering EPT might reduce the likelihood that a pregnant woman would seek medical care to assess the status of the pregnancy and test for other STD's such as hepatitis B, HIV, and syphilis, or that she would return for testing after treatment.

The drugs currently recommended by the Oregon STD program for expedited partner treatment, azithromycin for Chlamydia, and cefixime and azithromycin for Gonorrhea, are classified as Pregnancy Category B drugs (no evidence of risk in pregnant humans).

What if a female partner is breastfeeding?

With EPT, as in other therapeutic circumstances, practitioners should always consider potential effects on the infant when prescribing medicines to breastfeeding women. If the practitioner believes that the need to directly assess the breastfeeding partner and that the risks of presumptive treatment exceeds the benefits of EPT, then EPT should not be offered to a breastfeeding partner.

Azithromycin—the drug currently approved for expedited partner treatment of presumed Chlamydia infection—is used to treat some infections in infants and probably does not enter the breast milk in substantial quantities.

Cefixime is used along with azithromycin for expedited partner therapy of gonorrhea. It is not known if cefixime is excreted in breast milk. In general, cephalosporins are not expected to cause harmful effects in breast feeding infants; cefixime is sometimes used to treat certain kinds of infections in infants.

PARTNER SERVICES TRAINING OPPORTUNITIES

Want more training on...

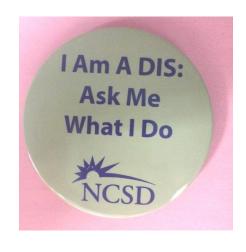
- Identifying and notifying partners of individuals diagnosed with HIV and STDs?
- Facilitating screening, treatment, and follow-up care for partners?



With your DIS

Your DIS is available for advice, training, problem solving, and consultation on STD case work and partner services follow-up.

Ask your DIS about shadowing and demonstration opportunities!



Intro to STI Partner Services

A five-module course on our STD program website. Take at your own pace.

Learn all about Partner Services basics, patient interviews, contacting and notifying exposed partners and more.



Passport to Partner Services

The official CDC course for Partner Services. You can still access the extensive online portion of the training without doing the inperson training.

Includes interactive learning opportunities and video demonstrations of patient interviews.

Contact Josh at 971-673-0149 or joshua.s.ferrer@state.or.us for further information and log-in instructions.



Other training ideas or needs? Please contact us to discuss!

Phone: 971-673-0153 www.healthoregon.org/std





Announcing...

HIV Prevention Essentials

A free, online training Available at http://bit.ly/trainHIV.

Who can benefit from this training?

- Staff offering HIV testing and other prevention or care services
- Volunteers and interested community members

What topics are covered?

The training includes eight modules:

- 1) HIV 101
- 2) Other sexually transmitted infections and hepatitis
- 3) Prevention strategies
- 4) Health behavior change
- 5) Cultural recognition
- 6) Sexuality, gender and HIV prevention
- 7) HIV testing and linkage
- 8) Observe and practice

HIV Prevention Essentials meets the training requirements described in Program Element #07 for staff conducting HIV testing funded by the Oregon Health Authority, HIV Prevention Program. The training includes new information about HIV testing and recommendations for determining whether counseling is necessary. The training prepares staff to offer accurate information and key messages about a variety of topics, including serosorting, pre-exposure prophylaxis (PrEP), post-exposure prophylaxis (PEP) and risk reduction for people who inject drugs.

How much time is required?

The training should take approximately six hours to complete. The training modules may be completed separately, as time allows.

Questions? Contact Dano at daniel.w.beck@state.or.us or (971) 673-0170.



Ordering Medications from the Oregon STD Program

The Oregon STD program is pleased to provide drugs free of charge to local health departments to treat chlamydia, gonorrhea, and syphilis.

Request forms should be completed and sent via fax to Gary Fosnaugh at 971-673-0178. Phone orders may also be called in to Gary at 971-673-0152. Orders are shipped same day whenever possible.

To be eligible to receive free drugs from the state each local health department (LHD) must:

- Follow rules outlined in the STD Program Element #10 around distribution and storage of drugs.
- Be certified in the federal 340B database as a covered entity. These certifications are processed through the state STD program.
- Recertify through the state STD program every year.
- Agree to adhere to 340B program requirements. These include ensuring drugs are only given to eligible patients of a covered entity (LHD). See the definition of an eligible patient on the reverse side of this fact sheet.

As a result of 340B rules, health departments are prohibited from using state STD program drugs for expedited partner therapy (to give to a patient to deliver to their sex partners). It is also prohibited to *give* a private provider a medication they may not have in-stock (such as bicillin) to treat a patient with an STD.

For further information on 340B requirements, please contact the Oregon STD program at 971-673-0153 or visit the HRSA 340B website at: http://www.hrsa.gov/opa/index.html.

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ELIGIBLE PATIENTS FOR 340B COVERED ENTITY DRUGS

According to the HRSA Office of Pharmacy Affairs, an individual is a patient of a 340B covered entity (with the exception of State-operated or funded AIDS drug purchasing assistance programs) only if:

- the covered entity has established a relationship with the individual, such that the covered entity maintains records of the individual's health care; and
- the individual receives health care services from a health care
 professional who is either employed by the covered entity or provides
 health care under contractual or other arrangements (e.g. referral for
 consultation) such that responsibility for the care provided remains with
 the covered entity; and
- the individual receives a health care service or range of services from the covered entity which is consistent with the service or range of services for which grant funding has been provided to the entity.

An individual will not be considered a patient of the covered entity if the only health care service received by the individual from the covered entity is the dispensing of a drug or drugs for subsequent self-administration or administration in the home setting.

http://www.hrsa.gov/opa/eligibilityandregistration/index.html

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STATE OF OREGON STD DRUG ORDER FORM

Date ordered	Date needed
Ship to:	State use
Your name:	Filled by
Organization:	
Address:	Date
City, State, Zip:	Oregon Health Authority / STD 800 NE Oregon Street, Suite 1105
Phone:	Portland, OR 97232
Please fax the for	Fax: 971-673-0178 Phone: 971-673-0152

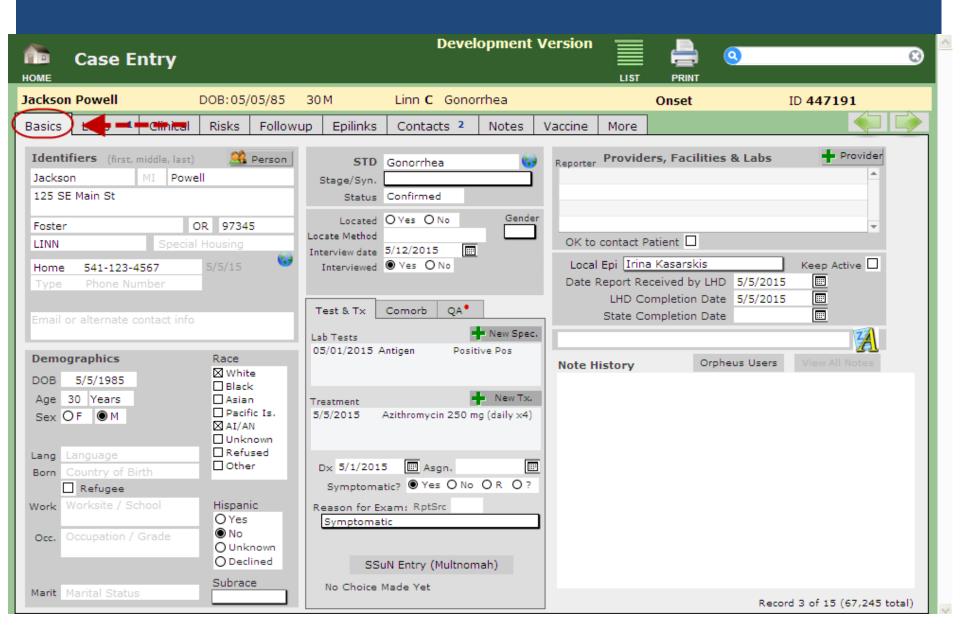
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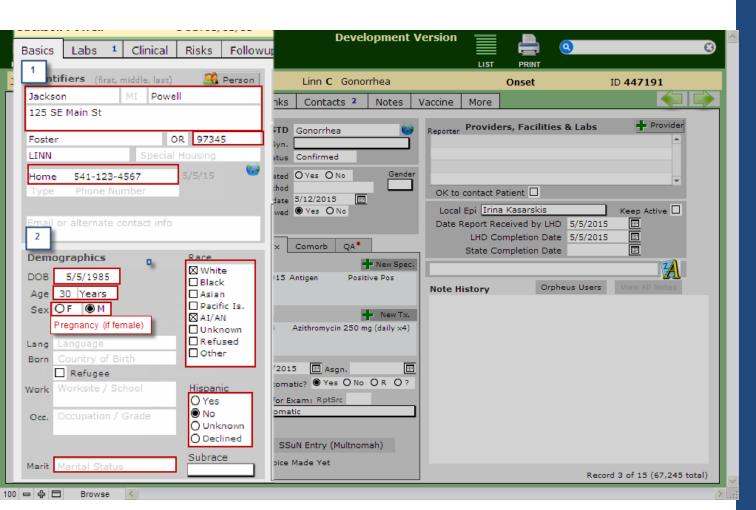
Gary

DRUG	CONTAINER, STRENGTH, AMOUNT PER CONTAINER	QUANTITY NEEDED (# of bottles, etc.)	QUANTITY SHIPPED (STATE USE)	LOT NUMBER (STATE USE)	EXPIRATION DATE (STATE USE)
Azithromycin (Zithromax)	Bottles 250mg tablet, 30 tablets / bottle				
Bicillin (Benzathine penicillin G)	Syringes 1.2 mu / 2ml syringe				
Ceftriaxone (Rocephin)	Vials 250mg / vial				
Lidocaine	Vials 100mg / 10ml vial				



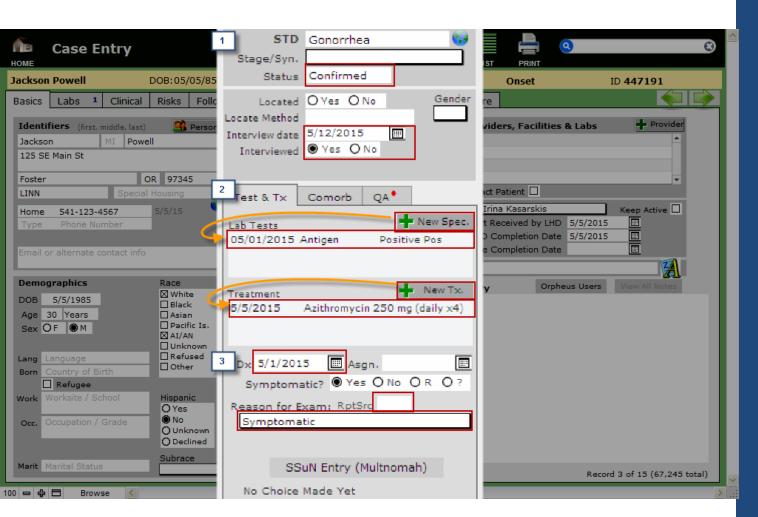
ENTERING A GONORRHEA CASE IN ORPHEUS





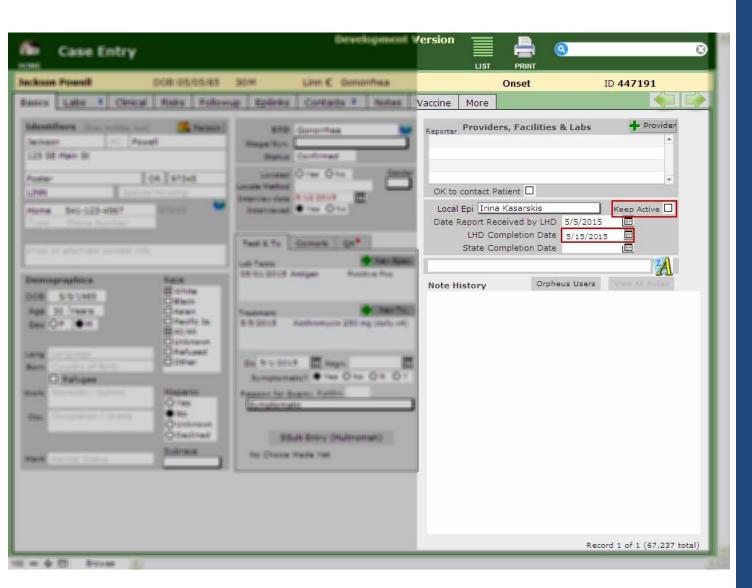
Basics Tab

- 1.
- Name
- Address
- Zip Code
- Phone Number
- 2.
- DOB or Age
- Sex
- Pregnancy Status (F only)
- Race
- Ethnicity
- MaritalStatus



Basics Tab

- 1.
- Status (confirmed)
- Interviewed
- Date of Interview
- 2.
- Lab Test
 (including
 date, test
 type, and
 result)
- Treatment (including date, drug, and dose)
- 3.
- Date of Dx
- Report Source
- Reason for Exam

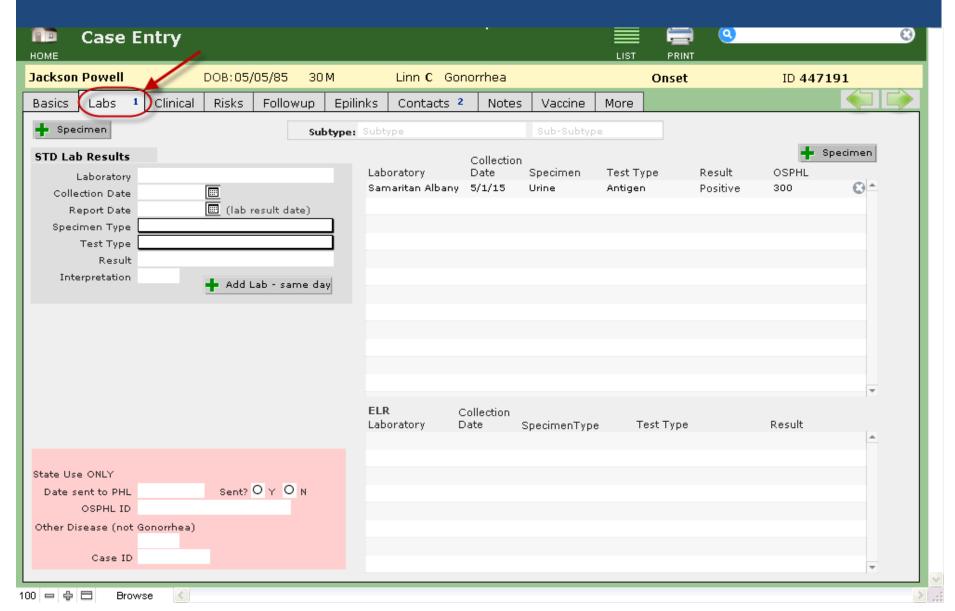


Basics Tab

1.

- LHD Completion Date
- Uncheck "Keep Active"

LAB TAB

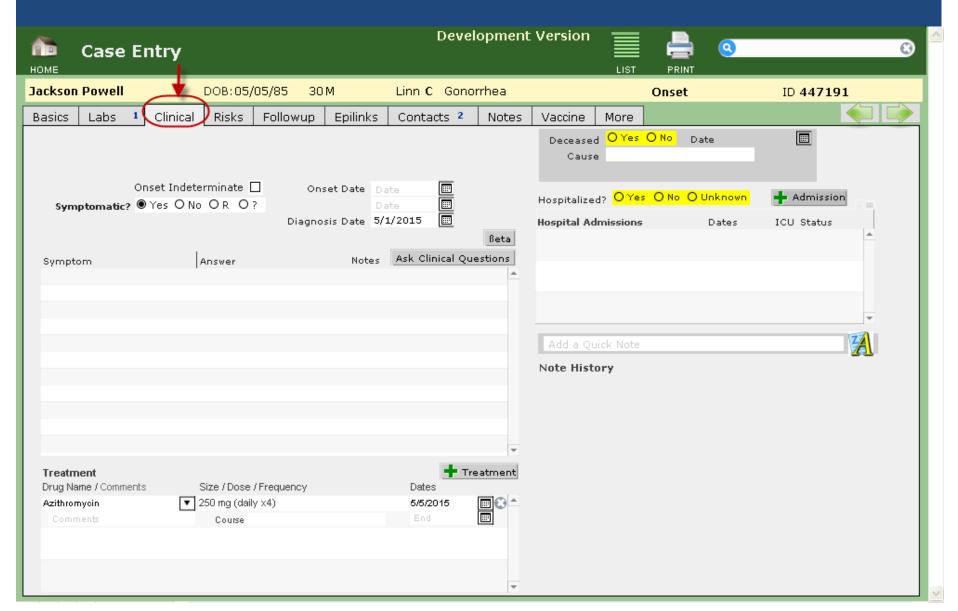


Development Version Case Entry PRINT Jackson Powell DOB:05/05/85 30 M Linn C Gonorrhea ID 447191 Onset Clinical Risks Basics Labs 1 Followup Epilinks | Contacts 2 Vaccine More + Specimen Subtype: Subtype Specimen STD Lab Results Collection Laboratory Samaritan Albany General Hosp -Date Test Type Result OSPHL Samaritan Albany 5/1/15 Urine Antigen 300 Positive Collection Date 5/1/2015 (lab result date) Report Date 5/5/2015 Specimen Type Urine Test Type Antigen Result Positive Interpretation Pos 📥 Add Lab - same day ELR Collection Laboratory SpecimenType Test Type Result State Use ONLY Sent? O Y O N Date sent to PHL OSPHL ID Other Disease (not Gonorrhea) 300 Gonorrhea Case ID 447191

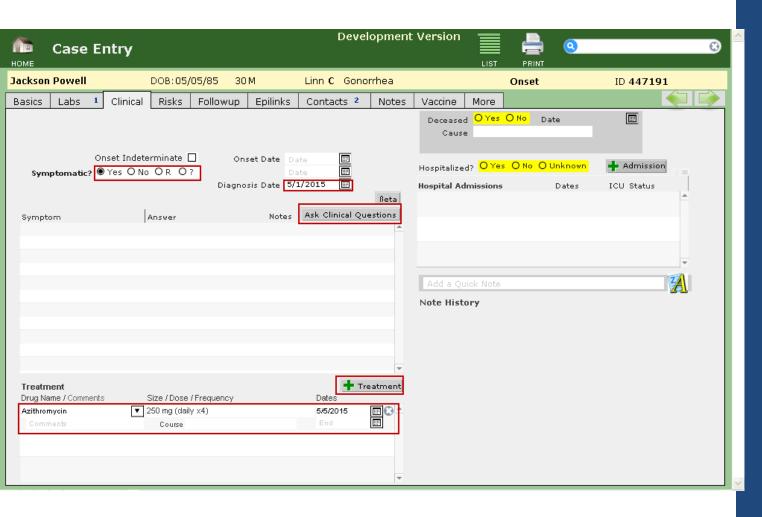
Lab Tab

- Laboratory
- Collection
 Date
- Report Date
- Specimen
 Type
- Test Type
- Result
- Interpretation

CLINICAL TAB



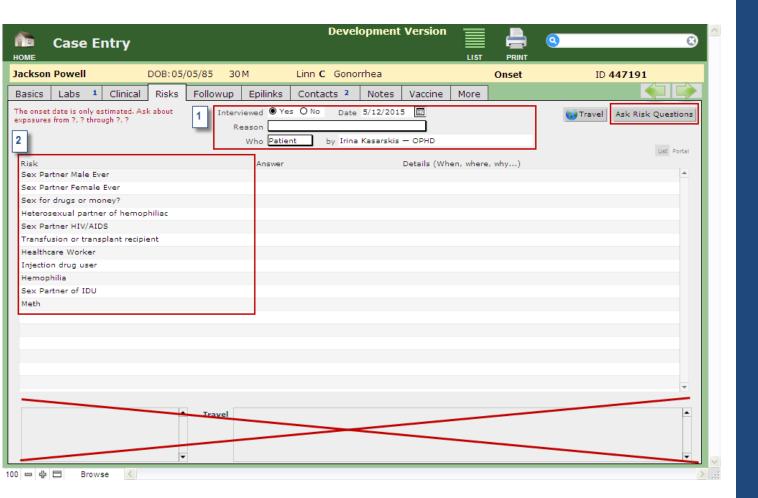
Clinical Tab



- Symptomatic
- Date of Diagnosis
- Ask Clinical Questions
- Treatment
 - Drug
 - Dose
 - Start Date
 - Stop Date

RISK TAB

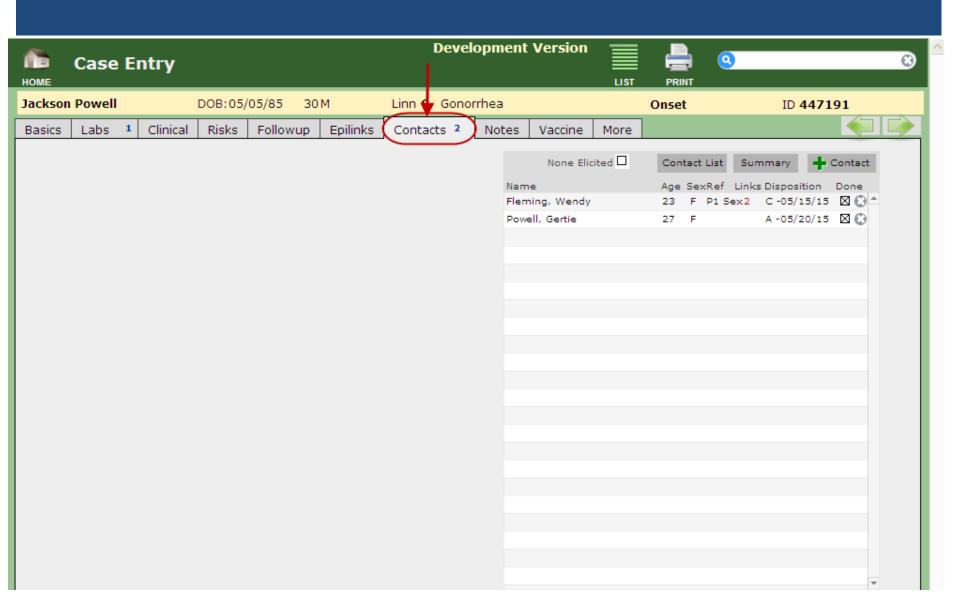
HOME	Case Entry			Developme	ent Version	LIST	PRINT	<u>Q</u>
Jackson	ı Powell	DOB: 05/05/85	30 M	Linn C Gonorrhea			Onset	ID 447191
Basics	Labs 1 Clinical	(Risks) Follo	wup Epilinks	Contacts 2 Note	es Vaccine	More		
	t date is only estimated. As s from ?, ? through ?, ?	sk about	Interviewed © You Reason Who Patie					Ask Risk Questions
Risk			Answer		Details (Whe	n, where,	why)	
Sex Pa	rtner Male Ever				•			A
Sex Pa	rtner Female Ever							
Sex for	r drugs or money?							
Hetero	sexual partner of hemo	philiac						
Sex Pa	rtner HIV/AIDS							
Transfu	usion or transplant recip	ient						
Healtho	care Worker							
Injectio	on drug user							
Hemop	hilia							
Sex Pa	rtner of IDU							
Meth								
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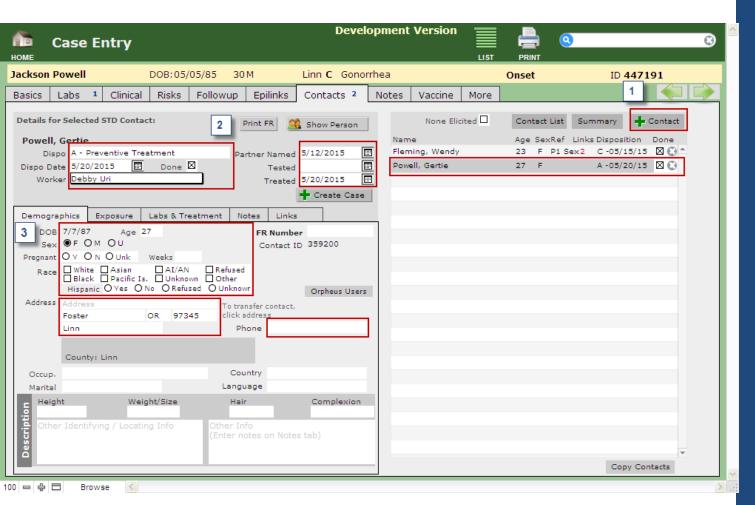


Risk Tab

- 1.
- Interviewed
- Date of Interview
- Reason (If not interviewed)
- Who was interviewed
- 2.
- Sex w/ M
- Sex w/F
- Anon Sex Partners
- Sex w/ IDU
- Exchange sex for drugs or money
- If F, Sex w/MSM
- IDU
- Use Internet to find partners

CONTACT TAB

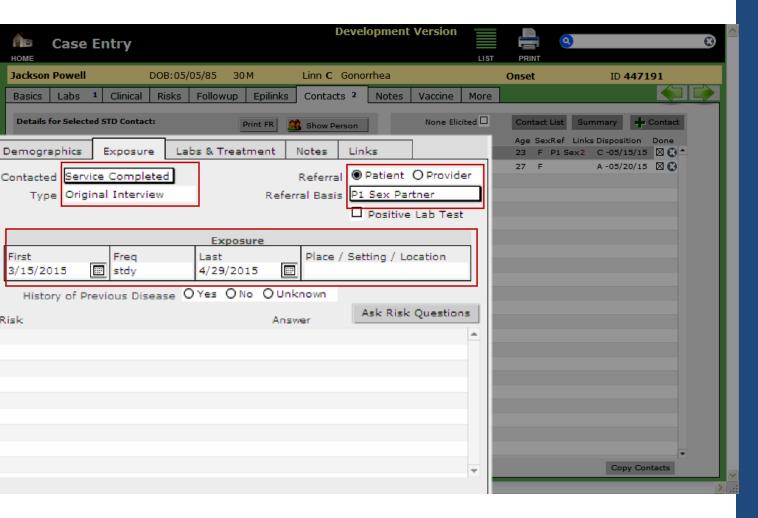




Contact Tab

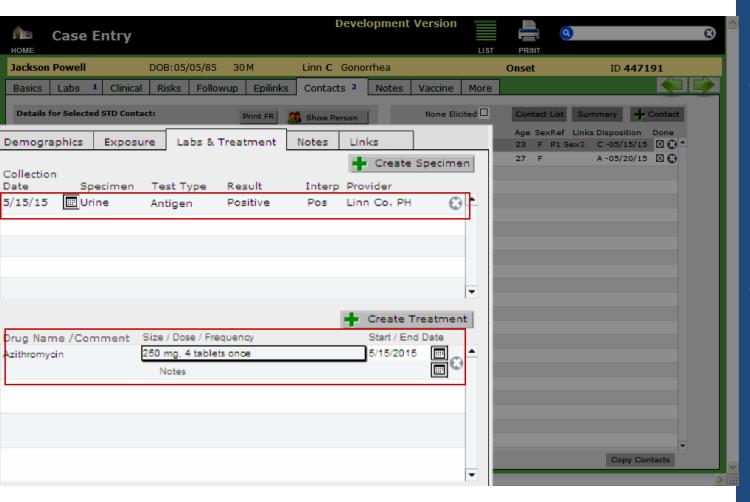
- 1.
- Click button to add contact
- 2.
- DispositionCode
- Dispo Date
- Worker
- Date Named
- Date Tested
- Date Treated
- 3.
 - Sex
- Age (or DOB)
- Race
- Pregnancy Status (F)
- Address
- Ph. Number

Contact Tab



- Contacted
- Type
- Referral
- Referral Basis
- Exposure

Contact Tab



Labs

- Collection Date
- Type of Specimen
- Test Type
- Result
- Interpretation
- Provider

Treatment

- Drug
- Dose
- Frequency
- Start Date
- **End Date**

ENTERING A SYPHILIS CASE IN ORPHEUS

PROCESSING ELR

*ALL DATA USED IN PRESENTATION ARE FAKE

ELR Patient Deta	LIST PRINT
Coutch, Renae	F DOB: 1/4/1966 Clackamas Syphilis Msg: 1/31/2016 Done 🗖 🌅 🔯
Search & Link Lab Report More	Search for Patient in Orpheus Flagged for Review Note Reason Ignored: Not a lead
ELR Person Info Last Coutch First Renae DOB 1/4/1966	Orpheus Person Info Person ID Confidence: 0 Search Result Unlinked
Sex ● F ○ M ○ U Race Hispanic	OF OM OU White Asian AI/AN Refused Black Pacific Is. Unknown Other
Phone 308-762-6843	Hisp O Yes O No O Unknown
ELR Lab Results Specimen Date: 01/23/2016 Lag: -1017 days Specimen Source: Unknown	Set these fields before confirming link Specimen Source Test Type RPR Result REACTIVE Reagin Ab If unable to confirm link with existing case: Create Case for Coutch, Renae Break Link with Ignore Lab Report
Change county to Clackamas on 5/5/2015 3:11:21 PM by Irina Kasarskis Change county to Douglas on 5/5/2015 3:11:14 PM by Irina Kasarskis	Existing Case Records for Disease County Onset LHD ReportCreated Status
Patient Name: Coutch, Renae DOB: 1/4/1966 Sex: F Address: 11901 Olive Blvd Phone: 308-762-6843 Note: Change county to Clackamas on 5/5/2015 3:11:21 PM by Irina Kasarskis Change county to Douglas on 5/5/2015 3:11:14 PM by Irina Kasarskis	Existing Lab records for all combined cases above Disease Lab Records Coll Date Test Result Note
Provider: Coffee, Creek Female	

ELR Patient Detail nenae c HOME LIST Msg: 1/31/2016 Done Coutch, Renae DOB: 1/4/1966 Clackamas Syphilis Search for Patient in Orpheus Flagged for Review Note Reason Ignored: Not a lead Search & Link Lab Report More FLR Person Info Orpheus Person Info Person ID 104562 Confidence: 66 Last Coutch Coutch Search Result First Renae 1/4/1966 49 DOB 1/4/1966 Sex @F OM OU ●F OM OU Race □White □Asian ☐ AI/AN ☐ Refused Black □ Pacific Is. □ Unknown □ Other Hispanic Phone 308-762-6843 503-915-1986 ▲ Hisp O Yes No 503-572-4025 **ELR Lab Results** Set these fields before confirming link If unable to confirm link with existing case: Specimen Date: 01/23/2016 Lag: -1017 Specimen Source Create Case for Coutch, Renae Test Type RPR Specimen Source: Unknown Break Link with Coutch, Renae Result REACTIVE Reagin Ab Ignore Lab Report ----- Additional Notes -----Change county to Clackamas on 5/5/2015 Existing Case Records for Renae Coutch 3:11:21 PM by Irina Kasarskis Change county to Douglas on 5/5/2015 LHD ReportCreated 3:11:14 PM by Irina Kasarskis Syphilis Washington 10/18/13 10/18/13 Confirm Case Link View Case 10/27/13 10/27/13 Confirm Case Link Syphilis Washington View Case ----- Other Details -----Patient Name: Coutch, Renae DOB: 1/4/1966 Sex: F Address: 11901 Olive Blvd Phone: 308-762-6843 Note: Change county to Clackamas on Existing Lab records for all combined cases above 5/5/2015 3:11:21 PM by Irina Kasarskis Lab Records Coll Date Disease Test Result Change county to Douglas on 5/5/2015 SYPHILIS FTA-ABS(DS) REACTIVE 4+ 3:11:14 PM by Irina Kasarskis Syphilis ELR 10/10/13 Syphilis Syphilis 10/11/13 RPR 1:128 Syphilis 01/13/14 RPR 1:8 Syphilis

Provider: Coffee, Creek Female

Browse

100 - 4 日

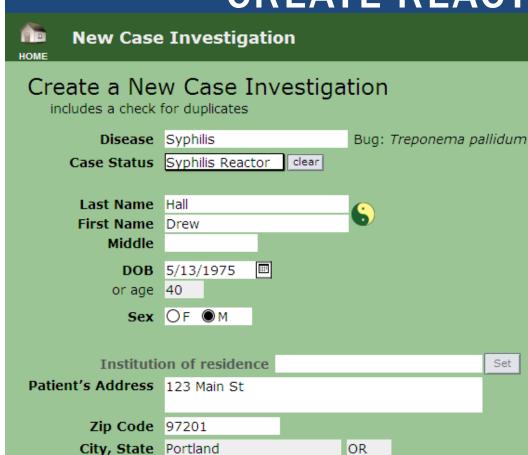
ELR

- 1.
- Search for Patient in Orpheus
- CheckName, DOB,Sex
- 2.
- Patient Does Not Exist in Orpheus
- Create
 Reactor
 Case in
 Orpheus

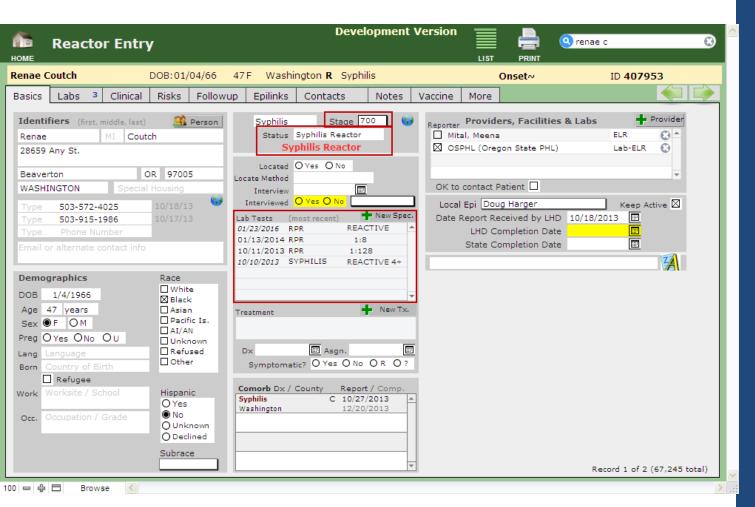
Patient Exists in Orpheus

ConfirmCase Link toReactor(Status = R)

CREATE REACTOR CASE



County Multnomah



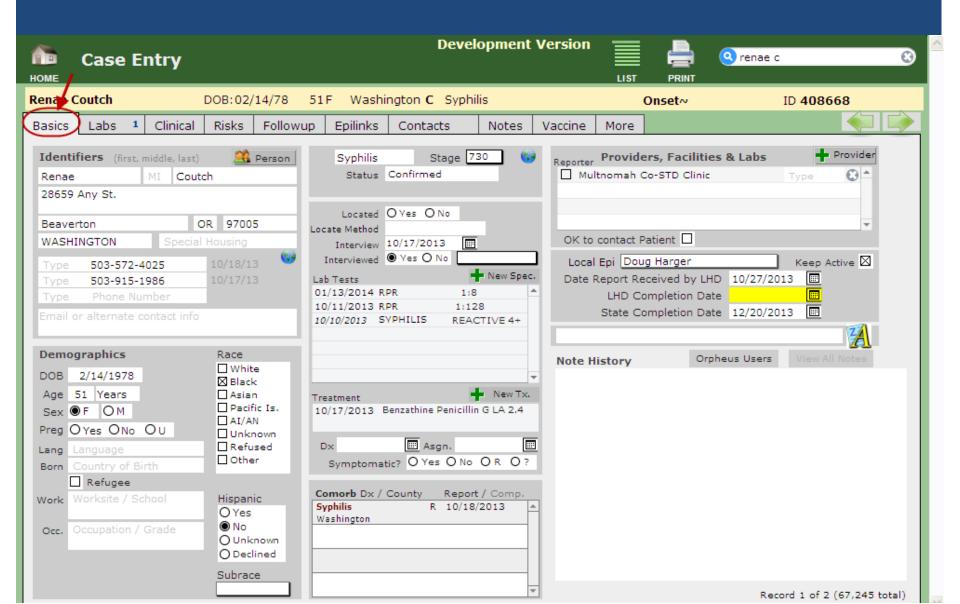
REACTOR

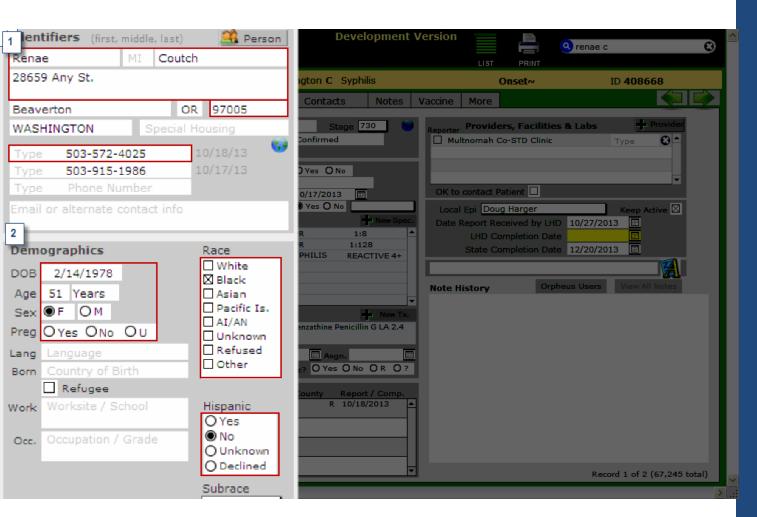
Enter

- Stage = 700
- Status = Syphilis Reactor
- Labs
 - SpecimenSource
 - Date of Specimen
 - Test (e.g., RPR)
 - Test Result
- Demographics
 - Address
 - Ph Number
 - Race
 - Ethnicity
 - Sex
- Providers

Do <u>NOT</u> Enter

- Treatment
- Notes



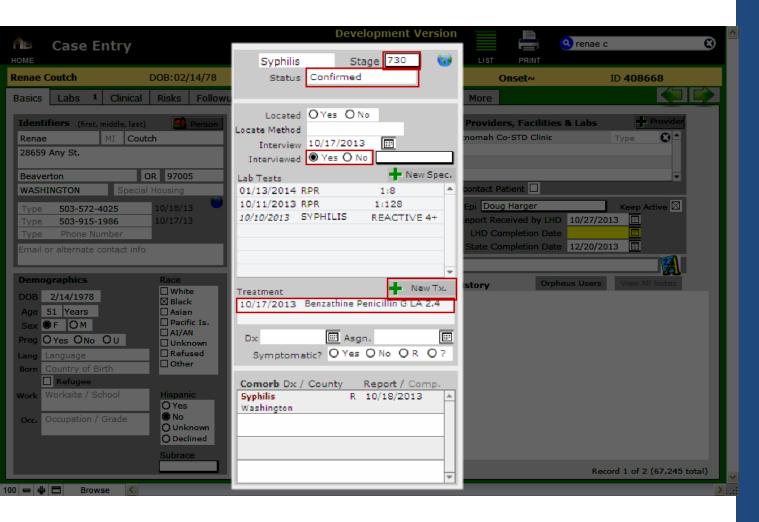


1.

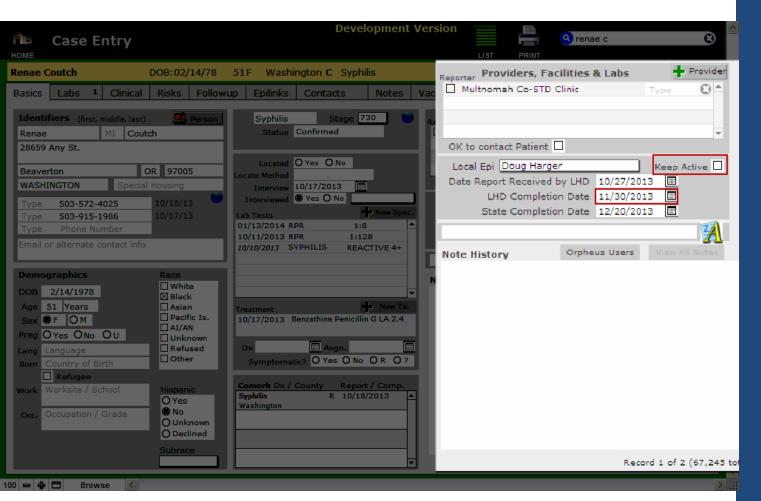
- Name
- Zip Code
- Phone #

2.

- DOB or Age
- Sex
- Pregnancy Status (F only)
- Race
- Ethnicity

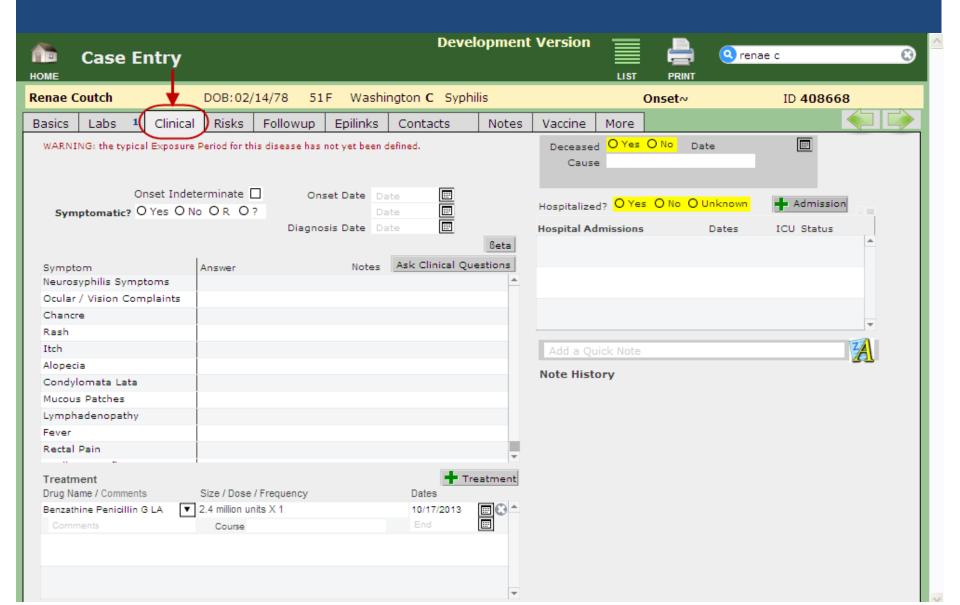


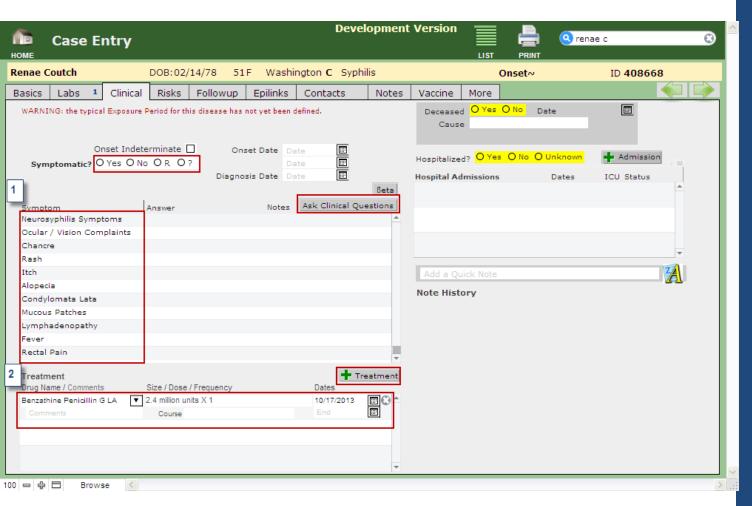
- Stage
- Status
- Treatment
- Labs are entered on the reactor



- LHD Completion Date
- Remove check for "Keep Active"

CLINICAL TAB

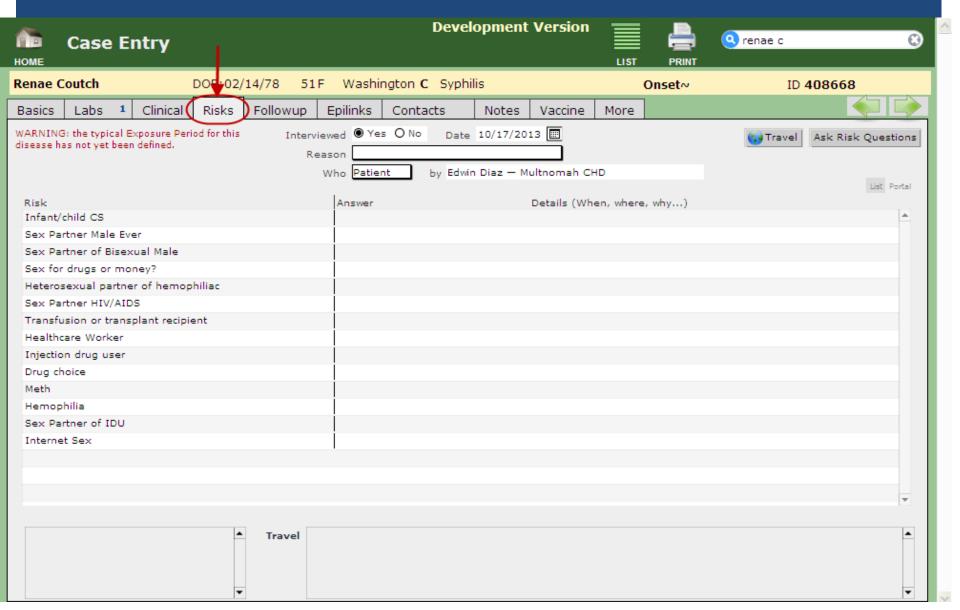


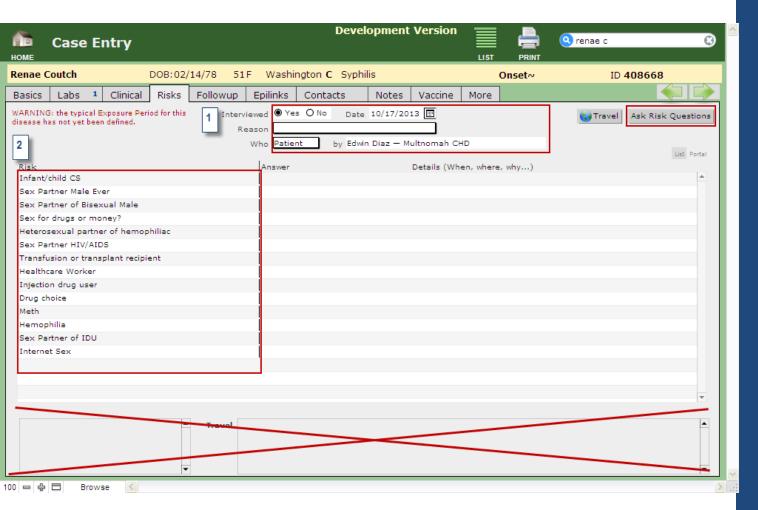


CLINICAL TAB

- 1.
- Symptomatic
- Neurosyphilis Symptoms
- Ocular / Vision Complaints
- 2.
- Drug Name
- Dose
- DateTreatmentStarted
- Date Treatment Ended

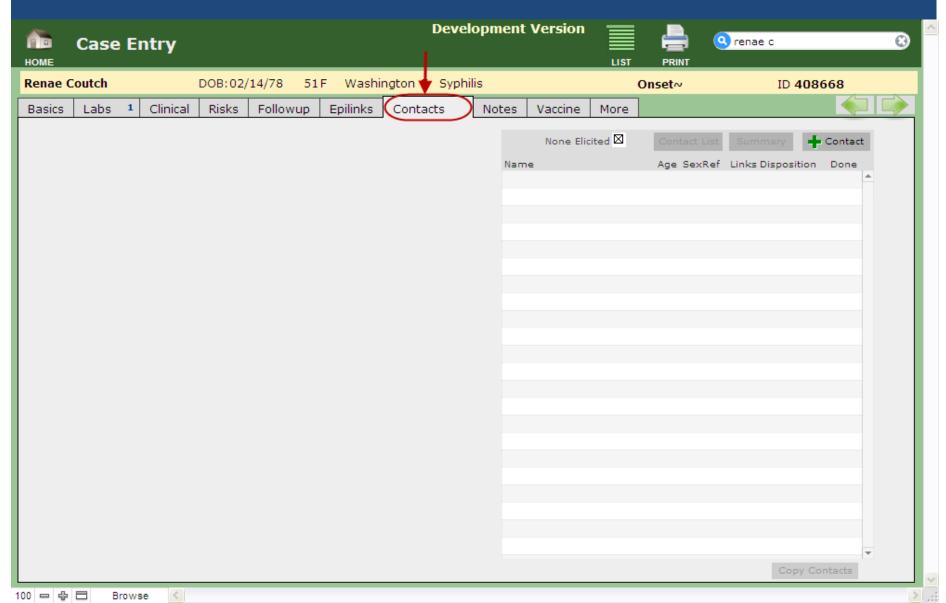
RISK TAB

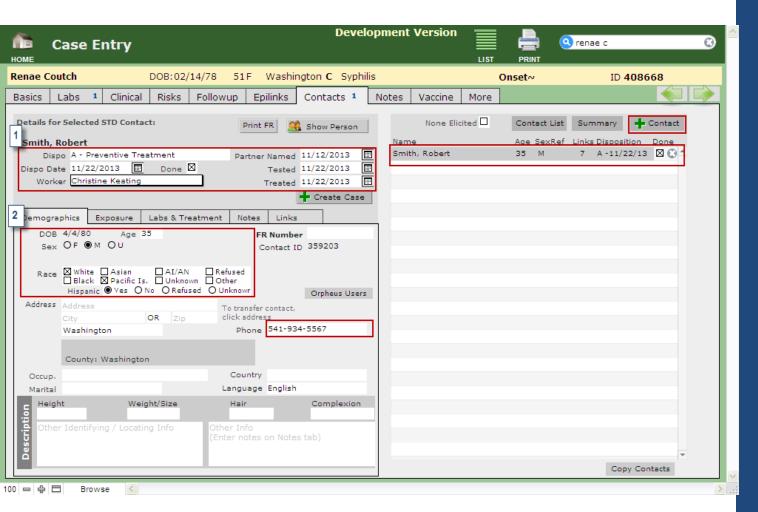




RISK TAB

- **1**.
- Interviewed
- Date of Interview
- Reason (if not interviewed)
- Who was interviewed
- 2.
- Sex w/ M
- Sex w/F
- Anon Sex Partners
- Sex w/IDU
- Exchange sex for drugs or money
- If F, Sex w/ MSM
- IDU
- Use Internet to find partners

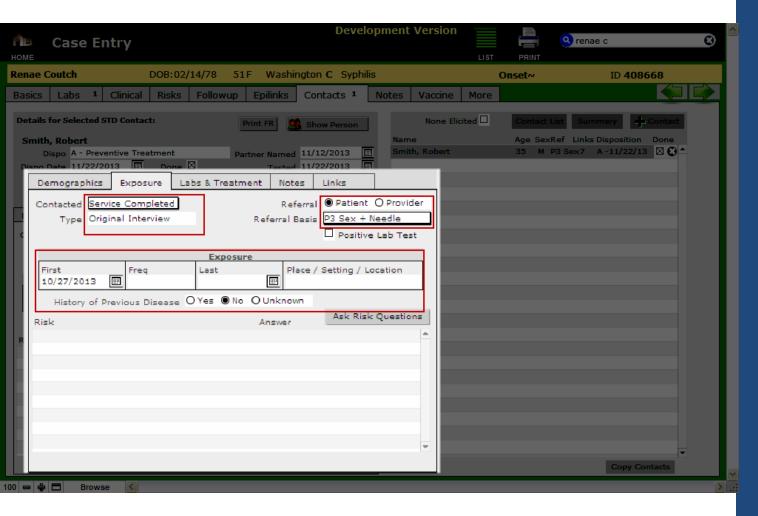




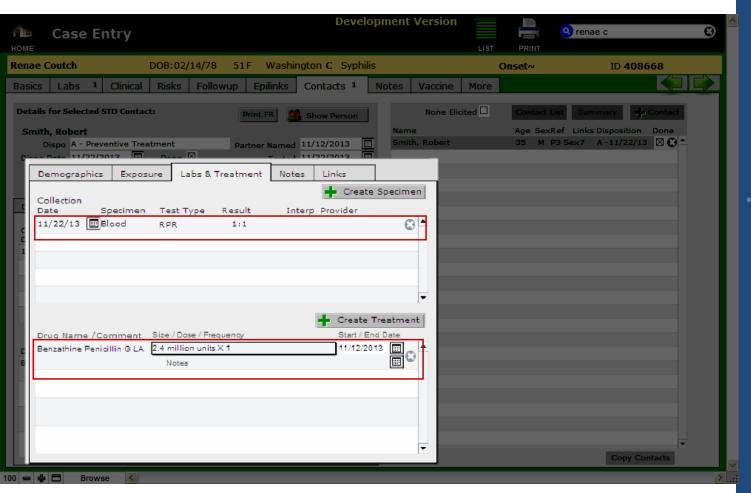
- Click button to add contact
- DispositionCode
- Dispo Date
- Worker
- Date Named
- Date Tested
- Date Treated

2.

- Sex
- Age (or DOB)
- Race
- Pregnancy Status (F)
- Address
- Ph. Number



- Contacted
- Type
- Referral
- Referral Basis
- Exposure



Labs

- CollectionDate
- Type of Specimen
- Test Type
- Result
- Interpretation
- Provider

Treatment

- Drug
- Dose
- Frequency
- Start Date
- End Date

